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(21) International Application Number: PCT/US98/06955 (22) International Filing Date: 10 April 1998 (10.04.98) (30) Priority Data: 08/838,821 10 April 1997 (10.04.97) US (71) Applicant: GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US). (72) Inventors: JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINI, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US). (74) Agent: SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).			(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs) (57) Abstract Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.			

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SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

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FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

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Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

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Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

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Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted

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proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

5 The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

 In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

15 In other embodiments, the present invention provides an isolated polynucleotide
consisting of a nucleotide sequence selected from the group consisting of:

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NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;

or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide
consisting essentially of a nucleotide sequence selected from the group consisting of:

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- 30 or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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25 NO:1441, SEQ ID NO:1442, SEQ ID NO:1443, SEQ ID NO:1444, SEQ ID
NO:1445, SEQ ID NO:1446, SEQ ID NO:1447, SEQ ID NO:1448, SEQ ID
NO:1449, SEQ ID NO:1450, SEQ ID NO:1451, SEQ ID NO:1452, SEQ ID
NO:1453, SEQ ID NO:1454, SEQ ID NO:1455, SEQ ID NO:1456, SEQ ID
NO:1457, SEQ ID NO:1458, SEQ ID NO:1459, SEQ ID NO:1460, SEQ ID
30 NO:1461, SEQ ID NO:1462, SEQ ID NO:1463, SEQ ID NO:1464, SEQ ID
NO:1465, SEQ ID NO:1466, SEQ ID NO:1467, SEQ ID NO:1468, SEQ ID
NO:1469, SEQ ID NO:1470, SEQ ID NO:1471, SEQ ID NO:1472, SEQ ID
NO:1473, SEQ ID NO:1474, SEQ ID NO:1475, SEQ ID NO:1476, SEQ ID
NO:1477, SEQ ID NO:1478, SEQ ID NO:1479, SEQ ID NO:1480, SEQ ID

NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID
 NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID
 NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID
 NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID
 5 NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;

or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides.

10 DETAILED DESCRIPTION

The nucleotide sequences of the sESTs of the present invention are reported in the Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each SEQ ID NO: in the Sequence Listing.

15 Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

1	BV31	18	CB302	35	BZ83	52	CD244
2	BV34	19	CB318	36	BZ87	53	CD265
20 3	BV37	20	CB321	37	CB15	54	BT217
4	BV45	21	CB96	38	CB2	55	BV278
5	BV8	22	CB98	39	CB44	56	BV280
6	BV93	23	BZ42	40	CC11	57	BV282
7	BV99	24	BZ53	41	CC182	58	BV285
25 8	CB100	25	BZ56	42	CC298	59	BV286
9	CB107	26	BZ6	43	CC310	60	BV291
10	CB110	27	BZ607	44	CC323	61	BV295
11	CB114	28	BZ61	45	CC332	62	BW389
12	CB118	29	BZ62	46	CC335	63	BX135
30 13	CB123	30	BZ641	47	CC338	64	BX141
14	CB129	31	BZ644	48	CC41	65	BX148
15	CB137	32	BZ72	49	CC52	66	BZ1
16	CB239	33	BZ74	50	CD107	67	BZ16
17	CB259	34	BZ82	51	CD205	68	BZ187

	69	BZ19	103	CE159	137	CH315	171	CC194
	70	BZ205	104	CE2	138	CH325	172	CC198
	71	BZ222	105	CE347	139	BZ568	173	CC199
	72	BZ230	106	CE36	140	BZ578	174	CC205
5	73	BZ234	107	CE40	141	BZ588	175	CC215
	74	BZ244	108	CE87	142	BZ597	176	CC253
	75	BZ269	109	CG1	143	BZ598	177	CC258
	76	BZ280	110	CG44	144	CH637	178	CC259
	77	BZ288	111	CG60	145	CH644	179	CC265
10	78	BZ304	112	CG68	146	CH699	180	CC288
	79	BZ328	113	BP202	147	CI240	181	CC95
	80	BZ331	114	BP242	148	CI247	182	CC96
	81	BP646	115	BP243	149	CJ1	183	CD311
	82	BP652	116	BZ444	150	CJ19	184	CD323
15	83	BP656	117	BZ453	151	CJ24	185	CH338
	84	BP666	118	CC233	152	CJ27	186	CH355
	85	BP667	119	CC242	153	CJ3	187	CH377
	86	BP674	120	CC247	154	CJ37	188	CH421
	87	BP695	121	CC344	155	CJ42	189	CH425
20	88	BP705	122	CC346	156	CJ44	190	CH522
	89	BP713	123	CC351	157	CJ49	191	CH541
	90	BP720	124	CC359	158	CJ50	192	CH555
	91	BP750	125	CC364	159	CJ55	193	CH558
	92	BP754	126	CC365	160	CJ6	194	CH582
25	93	BW143	127	CC374	161	CJ76	195	CH595
	94	BR307	128	CE303	162	CJ77	196	CH720
	95	BR309	129	CE328	163	CJ84	197	CH723
	96	BR312	130	CG199	164	CJ86	198	CH724
	97	BR318	131	CG209	165	CJ91	199	CH735
30	98	CB187	132	CG210	166	CC111	200	CH742
	99	CB190	133	CG350	167	CC118	201	CI126
	100	CB204	134	CG354	168	CC120	202	CI129
	101	CB213	135	CG426	169	CC126	203	CI133
	102	CE120	136	CH303	170	CC130	204	CI181

	205	CI229	239	CG160	273	CI395	307	CJ397
	206	CI25	240	CG175	274	CI407	308	CJ400
	207	CI52	241	CG176	275	CI411	309	CJ404
	208	CI84	242	CG180	276	CI437	310	CJ415
5	209	CI91	243	CG279	277	CI443	311	CJ420
	210	BP163	244	CG292	278	CI444	312	CJ424
	211	BP175	245	CG300	279	CI459	313	CJ434
	212	BP199	246	CG301	280	CI480	314	CJ454
	213	BP272	247	CG314	281	CI490	315	CJ457
10	214	BP284	248	CG315	282	CI492	316	CJ481
	215	BP294	249	CG324	283	CI493	317	CJ493
	216	BP299	250	CG336	284	CI510	318	CJ501
	217	BP300	251	CG99	285	CI522	319	CJ514
	218	BP306	252	CH143	286	CI534	320	CJ539
15	219	BP311	253	CH207	287	CI542	321	CJ540
	220	BP312	254	CH224	288	CI560	322	CJ549
	221	BP327	255	CH227	289	CI561	323	CJ551
	222	BP345	256	CH245	290	CI583	324	CK126
	223	BP368	257	CH246	291	CI586	325	CK151
20	224	BP467	258	CH27	292	CJ145	326	CK181
	225	BP468	259	CH30	293	CJ149	327	CK201
	226	BR375	260	CH4	294	CJ160	328	CK213
	227	BR390	261	CH64	295	CJ164	329	CK218
	228	BR408	262	CH78	296	CJ168	330	CK234
25	229	BR418	263	CH85	297	CJ176	331	CK37
	230	BY66	264	CH87	298	CJ183	332	CK48
	231	CF118	265	CN320	299	CJ194	333	CL104
	232	CF127	266	CN343	300	CJ206	334	CL110
	233	CF22	267	CN344	301	CJ230	335	CL122
30	234	CF235	268	CN395	302	CJ237	336	CL132
	235	CG109	269	CN423	303	CJ257	337	CL147
	236	CG131	270	CI363	304	CJ265	338	CL152
	237	CG153	271	CI386	305	CJ378	339	CL181
	238	CG158	272	CI392	306	CJ389	340	CL182

	341	CL399	375	CN516	409	CO58	443	CO155
	342	CL469	376	CN532	410	CO48	444	CO153
	343	CL470	377	CN552	411	CO444	445	CO145
	344	CL481	378	CN593	412	CO431	446	CO140
5	345	CL493	379	CN619	413	CO391	447	CO139
	346	CM12	380	CN621	414	CO384	448	CO128
	347	CM178	381	CN667	415	CO36	449	CO1254
	348	CM188	382	CN703	416	CO351	450	CO1247
	349	CM194	383	CN718	417	CO337	451	CO1232
10	350	CM246	384	CN729	418	CO327	452	CO1224
	351	CM251	385	CN835	419	CO315	453	CO1223
	352	CM54	386	CN896	420	CO304	454	CO1206
	353	CM62	387	CO933	421	CO270	455	CO1198
	354	CN140	388	CO924	422	CO268	456	CO1196
15	355	CN171	389	CO908	423	CO264	457	CO1194
	356	CN173	390	CO900	424	CO261	458	CO1187
	357	CN238	391	CO889	425	CO257	459	CO1180
	358	CN29	392	CO888	426	CO253	460	CO1178
	359	CN291	393	CO874	427	CO25	461	CO1175
20	360	CN304	394	CO851	428	CO246	462	CO117
	361	CN327	395	CO83	429	CO244	463	CO1168
	362	CN49	396	CO821	430	CO240	464	CO1164
	363	CN50	397	CO806	431	CO228	465	CO1162
	364	CN54	398	CO798	432	CO223	466	CO1161
25	365	CN65	399	CO79	433	CO222	467	CO1159
	366	CJ305	400	CO71	434	CO209	468	CO1153
	367	CJ316	401	CO7	435	CO205	469	CO1151
	368	CJ317	402	CO69	436	CO204	470	CO1137
	369	CJ336	403	CO66	437	CO20	471	CO1123
30	370	CJ347	404	CO639	438	CO197	472	CO1076
	371	CJ360	405	CO638	439	CO185	473	CO1072
	372	CJ365	406	CO625	440	CO170	474	CO1026
	373	CJ366	407	CO62	441	CO17	475	CO1000
	374	CN483	408	CO602	442	CO163	476	CN755

	477	CN736	511	CR1166	545	CR632	579	CO409
	478	CN709	512	CR1186	546	CR641	580	CO474
	479	CO975	513	CR1190	547	CT729	581	CO480
	480	CO990	514	CR329	548	CN922	582	CO500
5	481	CP280	515	CR354	549	CN934	583	CO519
	482	CP283	516	CR377	550	CN951	584	CO522
	483	CP287	517	CR390	551	CN952	585	CO526
	484	CP289	518	CR392	552	CN980	586	CO559
	485	CP294	519	CR422	553	CP111	587	CO595
10	486	CP304	520	CR423	554	CP147	588	CO605
	487	CP307	521	CR466	555	CU13	589	CO618
	488	CP311	522	CR477	556	CP251	590	CO629
	489	CP313	523	CR478	557	CP258	591	CO643
	490	CP314	524	CR482	558	CP33	592	CO653
15	491	CP328	525	CR491	559	CP41	593	CO661
	492	CP352	526	CR494	560	CP91	594	CO667
	493	CQ286	527	CR502	561	CP92	595	CO695
	494	CQ294	528	CR506	562	CQ160	596	CO696
	495	CQ304	529	CR513	563	CQ165	597	CO707
20	496	CQ309	530	CR514	564	CQ268	598	CO716
	497	CQ331	531	CR515	565	CQ30	599	CO718
	498	CQ333	532	CR527	566	CR100	600	CO720
	499	CR1116	533	CR529	567	CR178	601	CO722
	500	CR1118	534	CR537	568	CR184	602	CO736
25	501	CR1121	535	CR538	569	CR263	603	CO763
	502	CR1127	536	CR540	570	CR335	604	CO767
	503	CR1135	537	CR541	571	CR4	605	CP116
	504	CR1141	538	CR545	572	CR61	606	CP151
	505	CR1142	539	CR587	573	CR93	607	CI293
30	506	CR1144	540	CR588	574	CO282	608	CI294
	507	CR1147	541	CR593	575	CO310	609	CI298
	508	CR1155	542	CR594	576	CO334	610	CU14
	509	CR1156	543	CR611	577	CO387	611	CU2
	510	CR1162	544	CR618	578	CO390	612	CU25

	613	CU32	647	CR678	681	CT748	715	CS520
	614	CU39	648	CR726	682	CT738	716	CS524
	615	CU40	649	CR733	683	CT726	717	CS534
	616	DA10	650	CR778	684	CT706	718	CT14
5	617	DA136	651	CR836	685	CT705	719	CT142
	618	DA155	652	CR839	686	CT702	720	CT143
	619	DA16	653	CR872	687	CT693	721	CT149
	620	DA165	654	CR890	688	CT677	722	CT156
	621	DA170	655	CR916	689	CT658	723	CT159
10	622	DA183	656	CR929	690	CT645	724	CT162
	623	DA223	657	CR930	691	CT636	725	CT188
	624	DA224	658	CR936	692	CT631	726	CT189
	625	DA225	659	CR974	693	CT616	727	CT190
	626	DA227	660	CT747	694	CT611	728	CT193
15	627	DA228	661	CT727	695	CT600	729	CT194
	628	DA234	662	CT690	696	CT585	730	CT2
	629	DA244	663	CT649	697	CT583	731	CT207
	630	DA246	664	CT624	698	CS224	732	CT220
	631	DA274	665	CT564	699	CS255	733	CT223
20	632	DA471	666	CT88	700	CS267	734	CT226
	633	DA490	667	CT864	701	CS271	735	CT227
	634	DA495	668	CT857	702	CS278	736	CT24
	635	DA496	669	CT852	703	CS284	737	CT254
	636	DA504	670	CT838	704	CS296	738	CT256
25	637	DA505	671	CT808	705	CS297	739	CT258
	638	DA507	672	CT807	706	CS317	740	CT271
	639	DA516	673	CT797	707	CS319	741	CT275
	640	DA529	674	CT791	708	CS322	742	CT28
	641	DA84	675	CT785	709	CS353	743	CT284
30	642	CR1003	676	CT783	710	CS366	744	CT293
	643	CR1013	677	CT780	711	CS471	745	CO1020
	644	CR1044	678	CT771	712	CS475	746	CO1043
	645	CR1056	679	CT754	713	CS485	747	CO1067
	646	CR1063	680	CT750	714	CS516	748	CO1069

	749	CO1080	783	DB257	817	CW1617	851	CT384
	750	CO1081	784	DB343	818	CW1632	852	CT392
	751	CO1094	785	DB415	819	CW1636	853	CT394
	752	CO956	786	DB53	820	CW1640	854	CT415
5	753	CO973	787	DB85	821	CW169	855	CT421
	754	CJ471	788	CW1000	822	CW172	856	CT423
	755	CJ472	789	CW1038	823	CW173	857	CT434
	756	CJ475	790	CW1087	824	CW175	858	CT440
	757	CJ483	791	CW1100	825	CV123	859	CT443
10	758	CJ484	792	CW1109	826	CV156	860	CT450
	759	CJ485	793	CW1112	827	CV160	861	CT453
	760	CJ486	794	CW115	828	CV192	862	CT457
	761	CJ488	795	CW1150	829	CV203	863	CT466
	762	CJ496	796	CW1155	830	CV215	864	CT474
15	763	CJ497	797	CW1177	831	CV227	865	CT475
	764	CJ498	798	CW1195	832	CV263	866	CT479
	765	CJ507	799	CW1200	833	CV275	867	CT489
	766	CJ508	800	CW1201	834	CV305	868	CT51
	767	CJ519	801	CW1214	835	CV328	869	CT519
20	768	CJ520	802	CW1225	836	CV380	870	CT521
	769	CJ521	803	CW1230	837	CV394	871	CT526
	770	CJ522	804	CW1233	838	CV410	872	CT536
	771	CJ534	805	CW1272	839	CV416	873	CT541
	772	CJ536	806	CW1292	840	CV461	874	CT547
25	773	CJ543	807	CW1306	841	CV493	875	CT550
	774	CJ544	808	CW1311	842	CV501	876	CT559
	775	CJ547	809	CW1314	843	CT3	877	CT562
	776	CK53	810	CW1334	844	CT314	878	DE36
	777	CK7	811	CW1365	845	CT317	879	DE37
30	778	CK70	812	CW1372	846	CT320	880	DE4
	779	CL49	813	CW149	847	CT326	881	DE42
	780	CL63	814	CW152	848	CT340	882	DE63
	781	DB203	815	CW1574	849	CT353	883	DE70
	782	DB208	816	CW1611	850	CT358	884	DE83

	885	DE103	919	CS771	953	CW775	987	DA337
	886	DE105	920	CS773	954	CW795	988	DA348
	887	DE110	921	CS776	955	CW802	989	DA373
	888	DE114	922	CW222	956	CW823	990	DA388
5	889	DE117	923	CW224	957	CW835	991	DA389
	890	DE119	924	CW226	958	CZ115	992	DA390
	891	DE91	925	CW232	959	CZ122	993	DA391
	892	DE95	926	CW254	960	CZ186	994	DA414
	893	DE96	927	CW272	961	CZ214	995	DA428
10	894	CW420	928	CW280	962	CZ247	996	DA443
	895	CW424	929	CW313	963	CZ251	997	DA451
	896	CW457	930	CW314	964	CZ268	998	CW1458
	897	CW485	931	CW347	965	CZ270	999	CW1475
	898	CS383	932	CW354	966	CZ278	1000	CW1481
15	899	CS384	933	CW363	967	CZ291	1001	CW1506
	900	CS399	934	CW374	968	CZ320	1002	CW1510
	901	CS405	935	CW382	969	CZ326	1003	CW1543
	902	CS409	936	CW383	970	CZ362	1004	CW1550
	903	CS431	937	CW386	971	CW1414	1005	CW1552
20	904	CS438	938	CW388	972	CW1440	1006	CZ372
	905	CS454	939	CW512	973	CE209	1007	CZ374
	906	CS588	940	CW517	974	CE216	1008	CW902
	907	CS629	941	CW53	975	CE232	1009	CW922
	908	CS636	942	CW554	976	CE242	1010	CW924
25	909	CS637	943	CW585	977	CF193	1011	CW976
	910	CS638	944	CW618	978	CH776	1012	CW979
	911	CS645	945	CE197	979	CW1381	1013	CW984
	912	CS679	946	CW662	980	CW1389	1014	CW998
	913	CS682	947	CW675	981	CW1399	1015	CZ1
30	914	CS734	948	CW691	982	CZ653	1016	CW753
	915	CS743	949	CW707	983	CZ681	1017	CW759
	916	CS752	950	CW735	984	CZ711	1018	CW800
	917	CS756	951	CW762	985	CZ719	1019	CW891
	918	CS765	952	CW768	986	DA306	1020	CW960

	1021	CT80	1055	DC14	1089	DH1206	1123	DF478
	1022	DF1115	1056	CW1670	1090	DH1212	1124	DF483
	1023	DF1117	1057	CW1682	1091	DH1213	1125	DF494
	1024	DF1125	1058	DF814	1092	DH190	1126	DF499
5	1025	DF134	1059	DF821	1093	DI191	1127	DF7
	1026	DF14	1060	DF842	1094	DI207	1128	DF706
	1027	DF163	1061	DG1	1095	DI216	1129	DF713
	1028	DF174	1062	DG17	1096	DI243	1130	DF727
	1029	DF175	1063	DG174	1097	DI248	1131	DF737
10	1030	DF180	1064	DG256	1098	DI261	1132	DF756
	1031	DF185	1065	DG26	1099	DF1005	1133	DF757
	1032	DF201	1066	DG266	1100	DF1009	1134	DF762
	1033	DF202	1067	DG326	1101	DF1010	1135	DF776
	1034	DF203	1068	DG327	1102	DF102	1136	DF777
15	1035	DF206	1069	DG329	1103	DF1050	1137	DF780
	1036	DF219	1070	DG330	1104	DF1062	1138	DF783
	1037	DF230	1071	DG331	1105	DF1063	1139	DG12
	1038	DF232	1072	DG44	1106	DF1084	1140	DG121
	1039	DF239	1073	DG65	1107	DF153	1141	DG128
20	1040	DF244	1074	DG69	1108	DF218	1142	DG141
	1041	DF259	1075	DG7	1109	DF251	1143	DG149
	1042	DF266	1076	DG71	1110	DF280	1144	DH28
	1043	DF46	1077	DG76	1111	DF286	1145	DH303
	1044	DF65	1078	DG82	1112	DF316	1146	DH318
25	1045	DF69	1079	DH1086	1113	DF317	1147	DH322
	1046	DB145	1080	DH1098	1114	DF343	1148	DH340
	1047	DB150	1081	DH1135	1115	DF347	1149	DH371
	1048	DB159	1082	DH1145	1116	DF370	1150	DH40
	1049	DB174	1083	DH1153	1117	DF382	1151	DH401
30	1050	DB180	1084	DH1182	1118	DF396	1152	DH432
	1051	CY1	1085	DH1185	1119	DF428	1153	DH451
	1052	CY11	1086	DH1190	1120	DF453	1154	DH496
	1053	CY3	1087	DH1191	1121	DF457	1155	DH502
	1054	CY9	1088	DH1201	1122	DF460	1156	DH529

	1157	DH66	1191	DF915	1225	DH1357	1259	DI501
	1158	DF518	1192	DF948	1226	DH145	1260	DI504
	1159	DF521	1193	DF950	1227	DH999	1261	DK111
	1160	DF538	1194	DF956	1228	DI160	1262	DK113
5	1161	DF543	1195	DF966	1229	DI386	1263	DK120
	1162	DF545	1196	DF968	1230	DI391	1264	DK122
	1163	DF547	1197	DF971	1231	DI435	1265	DK126
	1164	DF568	1198	DF973	1232	DI448	1266	DK134
	1165	DF587	1199	DF979	1233	DI454	1267	DK136
10	1166	DF589	1200	DF984	1234	DJ109	1268	DK150
	1167	DF591	1201	DF989	1235	DJ146	1269	DK160
	1168	DF601	1202	DH1257	1236	DJ167	1270	DK170
	1169	DF606	1203	DH1308	1237	DF1065	1271	DK182
	1170	DF62	1204	DH1314	1238	DI387	1272	DK185
15	1171	DF620	1205	DI341	1239	DI393	1273	DK197
	1172	DF625	1206	DH1265	1240	DI403	1274	DK206
	1173	DF648	1207	DI349	1241	DI430	1275	DK219
	1174	DF657	1208	DI355	1242	DI438	1276	DK223
	1175	DF659	1209	DI362	1243	DJ2	1277	DK227
20	1176	DF661	1210	DI366	1244	DJ188	1278	DK229
	1177	DF662	1211	DI508	1245	DJ238	1279	DK230
	1178	DF670	1212	DI516	1246	DJ259	1280	DK243
	1179	DF674	1213	DI518	1247	DK64	1281	DK264
	1180	DF682	1214	DF1066	1248	DK70	1282	DK268
25	1181	DF688	1215	DF1069	1249	DK81	1283	DK31
	1182	DF810	1216	DG279	1250	DK84	1284	DK39
	1183	DF823	1217	DH1010	1251	DI462	1285	DK93
	1184	DF835	1218	DH1013	1252	DI466	1286	DL101
	1185	DF860	1219	DH1044	1253	DI474	1287	DL110
30	1186	DF877	1220	DH1045	1254	DI475	1288	DL116
	1187	DF883	1221	DH1073	1255	DI479	1289	DL132
	1188	DF895	1222	DH1078	1256	DI480	1290	DL63
	1189	DF909	1223	DH1340	1257	DI482	1291	DL82
	1190	DF910	1224	DH1349	1258	DI500	1292	DL95

	1293	DL99	1327	DL491	1361	DL547	1395	DO181
	1294	DJ332	1328	DL495	1362	DL550	1396	DO419
	1295	DJ362	1329	DL498	1363	DL551	1397	DO424
	1296	DK290	1330	DL504	1364	DL601	1398	DO440
5	1297	DK321	1331	DM118	1365	DL604	1399	DO447
	1298	DK324	1332	DM122	1366	DL605	1400	DO568
	1299	DK329	1333	DM126	1367	DL607	1401	DO575
	1300	DK357	1334	DM128	1368	DL608	1402	DO589
	1301	DK360	1335	DM130	1369	DL616	1403	DO610
10	1302	DL141	1336	DM147	1370	DL619	1404	DO715
	1303	DL146	1337	DM169	1371	DL620	1405	DO722
	1304	DL162	1338	DM26	1372	DL634	1406	DO737
	1305	DL163	1339	DM404	1373	DM194	1407	DO742
	1306	DL169	1340	DM406	1374	DM197	1408	DO755
15	1307	DL181	1341	DM407	1375	DM221	1409	DO765
	1308	DL185	1342	DM420	1376	DM248	1410	DO797
	1309	DL218	1343	DM425	1377	DM250	1411	DO836
	1310	DL220	1344	DM435	1378	DM262	1412	DO884
	1311	DL248	1345	DM445	1379	DM265	1413	DO896
20	1312	DL289	1346	DM449	1380	DM272	1414	CZ549
	1313	DL290	1347	DM459	1381	DM278	1415	CZ598
	1314	DL291	1348	DM462	1382	DM293	1416	DT431
	1315	DL316	1349	DM469	1383	DM303	1417	DT443
	1316	DL320	1350	DM482	1384	DM340	1418	DT446
25	1317	DL321	1351	DM6	1385	DM360	1419	DT449
	1318	DL425	1352	DM94	1386	DM365	1420	DT450
	1319	DL426	1353	DJ279	1387	DM522	1421	DT455
	1320	DL427	1354	DJ284	1388	DM533	1422	DT458
	1321	DL439	1355	DJ299	1389	DM542	1423	DN106
30	1322	DL440	1356	DJ319	1390	DM87	1424	DN153
	1323	DL444	1357	DJ323	1391	DN124	1425	DN176
	1324	DL457	1358	DL531	1392	DN144	1426	DT530
	1325	DL463	1359	DL535	1393	DN147	1427	DT534
	1326	DL466	1360	DL543	1394	DN167	1428	DT535

	1429	DT544	1463	DW1	1497	BK5
	1430	DT563	1464	DW389	1498	BK504
	1431	DT584	1465	DW398	1499	BK513
	1432	DT590	1466	DW654	1500	BK517
5	1433	DT596	1467	DW659		
	1434	DT597	1468	DW665		
	1435	DT598	1469	DW694		
	1436	DT640	1470	DW705		
	1437	DT655	1471	DW716		
10	1438	DT674	1472	DW749		
	1439	DT719	1473	DW761		
	1440	DT734	1474	DW765		
	1441	DT779	1475	DW771		
	1442	DT801	1476	DW78		
15	1443	DT802	1477	DW780		
	1444	DN696	1478	BK10		
	1445	DN697	1479	BK11		
	1446	DN704	1480	BK2		
	1447	DN710	1481	BK368		
20	1448	DN711	1482	BK373		
	1449	DN714	1483	BK374		
	1450	DN721	1484	BK375		
	1451	DN722	1485	BK384		
	1452	DN732	1486	BK402		
25	1453	DN740	1487	BK410		
	1454	DN746	1488	BK415		
	1455	DN747	1489	BK425		
	1456	DN753	1490	BK427		
	1457	DN756	1491	BK436		
30	1458	DN764	1492	BK445		
	1459	DN770	1493	BK455		
	1460	DN772	1494	BK458		
	1461	DN1120	1495	BK494		
	1462	DU372	1496	BK498		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification
5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that
10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making
15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the
20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions,
25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) ²	Hybridization Temperature and Buffer ¹	Wash Temperature and Buffer ¹
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T _B *; 1xSSC	T _B *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T _D *; 1xSSC	T _D *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T _F *; 1xSSC	T _F *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T _H *; 4xSSC	T _H *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T _J *; 4xSSC	T _J *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T _L *; 2xSSC	T _L *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T _N *; 6xSSC	T _N *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T _P *; 6xSSC	T _P *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T _R *; 4xSSC	T _R *; 4xSSC

[‡]: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

[†]: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

*T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T_m(°C) = 81.5 + 16.6(log [Na⁺]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na⁺] is the concentration of sodium ions in the hybridization buffer ([Na⁺] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. The ~~isolated~~ polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* 185, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

5 A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from in vitro culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

10 Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any
15 bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

20 The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, e.g., Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art,
25 as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting
30 expressed protein may then be purified from such culture (i.e., from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligands. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

10 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, *In Vitro* assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, *Immunologic studies in Humans*); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

20 Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: *Polyclonal T cell stimulation*, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and *Measurement of mouse and human Interferon γ* , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

30 Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: *Measurement of Human and Murine Interleukin 2 and Interleukin 4*, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; *Measurement of mouse and human interleukin 6* - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.
- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, *Leishmania* spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this matter prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythmatosis in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Herrmann et al., Proc. Natl. Acad. Sci. USA 78:2488-2492, 1981; Herrmann et al., J. Immunol. 128:1968-1974, 1982; Handa et al., J. Immunol. 135:1564-1572, 1985; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Herrmann et al., Proc. Natl. Acad. Sci. USA 78:2488-2492, 1981; Herrmann et al., J. Immunol. 128:1968-1974, 1982; Handa et al., J. Immunol. 135:1564-1572, 1985; Takai et al., J. Immunol. 137:3494-3500, 1986; Bowman et al., J. Virology 61:1992-1998; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., Cellular Immunology 133:327-341, 1991; Brown et al., J. Immunol. 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, J. Immunol. 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: Current Protocols in Immunology, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad Sci. USA 88:7548-7551, 1991.

Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet
5 transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post
10 irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

15 Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al.,
20 *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic*
25 *Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994;
30 Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

A protein of the present invention, which induces cartilage and/or bone growth in
10 circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,
20 alone or in heterodimers with a member of the inhibin α family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et
30 al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al. J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.
25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborg et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

Tumor Inhibition Activity

20 In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

30

Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the

5 fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent

10 behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for

15 example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5 The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides, 10 diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15 As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient, 20 administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a 25 mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either 30 simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous
5 administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an
10 adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain
15 physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

20 When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical
25 composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers,
30 antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem.Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systematically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1or2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	PeripheralBloodMononuclearCell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	SalivaryGland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	PeripheralBloodMononuclearCell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

SEQUENCE LISTING

(1) GENERAL INFORMATION:

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LaVallie, Edward
Racie, Lisa
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- (iii) NUMBER OF SEQUENCES: 1500
- (iv) CORRESPONDENCE ADDRESS
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 - (E) COUNTRY: U.S.A
 - (F) ZIP: 02140
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy Disk
 - (B) COMPUTER: IBM PC Compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER:
 - (B) FILING DATE:
 - (C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
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(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

GAATTCGGCC	TTCATGGCCT	AAGTGTTTAA	ATTATAAGCT	GGTGAAGTGA	AATAACACAA	60
ATCAAGCTCA	CCAATTTTAA	TACTCAGCTG	TTGATAAACA	ACACTGAAGA	GTGACATTTA	120
AATTTGAATT	ATCTTCTTTG	AAGTAGCATT	GCAGCACTTT	TGAATGACTT	CCAAAAGGCT	180
GATCATAAAA	ATCACTTCAA	TCATTTTCAA	ATTTTACTTT	AGCAGCAATG	AAGTTATTTG	240

GTATGACTCA GATGAACCTT CTGCTCTGTC TTGGAGTTAT TATGGTCATT TCATTTTCTG 300
CAACCTGGGA AACCTCGAG 320

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 357 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GAATTCGGCC TTCATGGCCT ACGAGTGGAT CTGGTTGAGA GGAAAGCAGC TAAAAATACA 60
GGAGATGAAA GGGATCATAA CGAACATAAT GAACCATGTT CATTATGGTT CGTGGGGAGG 120
CAGGAAAGCA CAGTATCCAG GGCATAGGCA GAAGAGCTGT CTTTCACGGG AGGAGGGGAA 180
CATATTCTAC TGCAATAAGC AAGGGCGGGG TAAGTACGGA TCGGGTACTT TGGGAAGTAT 240
GACGGTAGGG AGTTCAGGAA GTTGCTGCCT GAAGGCATAA AGGTTTTTTT TTTTTTTTTT 300
TTTTTTTGCC AATTGGTCCA GTACCCTCCT TCTGTGGCCC CCATCTCCAG TCTCGAG 357

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 249 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GAATTCCTTTA TATAATTTGG ATACCTACTC ATTGTCAGTT GTATGCTTTG CAAATATCTT 60
TCCTGACCCT TACTTACCTT TTCACTCTTA ATGGTATCTT TGATGAATCA AAAATTTTTC 120
TTTTTTTGTT GTTTTTTGAG ACAGAGTCTT AACTCTGTCA CCCAGGCTGG AGTGCAGTGC 180
ATGAACATGG CTCACTGCAG CCTCAACTTC TTGGACTCAA GCAATCCTCC TGCCTCAGAA 240
CCTCTCGAG 249

(2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CTAGCTCCTT TCCTTCTACT CTCCTGCTCA 60
GACCATTAGT AGGTACTTTG TTAAATAAAA AACTAGATTA ACATCAATAT TACTCCAATT 120
TGGTATCTTT TAACTATGT ATTATACCTA CTTTCTTTT ATTTCAATTA CAAATAGTTT 180
AAATTACTTT ATCAACCAGC TGTATTGTTT CCCTCTTGTA AAAGTACCAT CAAGTGGGGA 240
AAATGTATGT GGCAGTCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

```
GAATTCGGCC TTCATGGCCT AATAACTTAC CCAGTCACGA ATATTTCTTC ATAGCAGCAT      60
CAGAGTGGAC TAATACGATT ATAATTATCA TCACCTTTTG ACTGACCAAT TGATTACAG      120
TATTGAGTTC AATCTGTTTT TTTAAAAAAT ATCTTCTAAA TATCAGGTGC TGTATTAGAT      180
GTGGGTACA AAAATGTATT TTCATTACT CACTAATTTA CTTAAAATTT ATTTATTGAG      240
GTACCTCGAG                                         250
```

(2) INFORMATION FOR SEQ ID NO:6:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

```
GAATTCGGCC TTCATGGCCT AGGTGCTGGA ACTAAGCTGT GTGAACAAAT GAGACGATTC      60
CCCTTTCTAA TGAGTTTATA TGCAATGTGG TATCTTTACC GATACATGCT CTGTCAGAAA      120
GAAGCAGCCC ACTTCTGTCC AATAGCCAAT CCGGCTTCAG GAGCAGCAGG AGAGGCTTCG      180
GGAACGGGAG AAGAGGCTTC AGCAGCTGGC CGAGCCACAG AGCGACTTGG AGGAGCTGCA      240
CGAGAACAAG AGCGCACTGC AGTTGGAGAG CTCGAG                                         276
```

(2) INFORMATION FOR SEQ ID NO:7:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 284 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

```
GAATTCGGCC TTCATGGCCT ACTCATTCCA AAATAAAAAA AAAAATTTC CATGATCTTA      60
TCTAGCTTCT CTAGCAGTAC TTGTATGATT TCACCTTTCT TTCTTTATTC TTTTCTCCA      120
TATTTTTTTT TTTTGAGACA GGGTCTCACT CTATTGTCCA GGCTAGAGTG CAGTAGTTTG      180
ATCATGACTC ACTCTAACCT GGACCTCCGG GGCCTAAGTA ATCTTCCCAC CTCAGCCTCT      240
CAAGTAGCTG GGACTACAGG GATGTACCAC CATGCCTGGC TAAG                                         284
```

(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 394 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```

GTTGAATTCT AGACCTGCCT CGAGGACGCC AGGGAAGTGA GTTGAAAATC TGAAAATGCG      60
GCCATGGACT GGTTCCTGGC GTTGGATTAT GCTCATTCTT TTTGCCTGGG GGACCTTGCT      120
GTTTTATATA GGTGGTCACT TGGTACGAGA TAATGACCAT CCTGATCACT CTAGCCGAGA      180
ACTGTCCAAG ATTCTGGCAA AGCTTGAACG CTTAAAACAG CAGAATGAAG ACTTGAGGCG      240
AATGGCCGAA TCTCTCCGGA TACCAGAAGG CCCTATTGAT CAGGGGCCAG CTATAGGAAG      300
AGTGCGCGTT TTAGAAGAGC AGCTTGTTAA GGCCAAAGAA CAGATTGAAA ATTACAAGAA      360
ACAGACCAGA AATGGTCTGG GGAAGGATCT CGAG                                     394

```

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

```

GCTGTGATGA AAATGCTTTA TGCTTCAACA CTGTTGGAGG ACACAACTGT GTTTGCAAGC      60
CGGGCTATAC AGGGAATGGA ACGACATGCA AAGCATTTTG CAAAGATGGC TGTAGGAATG      120
GAGGAGCCTG TATTGCCGCT AATGTGTGTG CCTGCCACAC AGGCTTCACT GGACCCAGCT      180
GTGAAACGGA CATTGATGAA TGCTCTGATG GTTTTGTTCA ATGTGACAGT CGTGCTAATT      240
GCATTAACCT GCCTGGATGG TACCACTGTG AGTGCAGAGA TGGCTACCAT GACAATGGGA      300
TGTTTTACC AAGTGGAGAA TCGTGTGAAG ATATTGATGA GTGTGGGACC ACTCGAG       357

```

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

```

GAATTCGGCC TTCATGGCCT ATTTCCGATC TATGTATCTG TACTCATACA GCCTCATCGG      60
GCTAAACAGC CTTCTTTTCA GAACAGTAGA TCACTCAACT GGGTTTTCAA GTGACTGTTT      120
ACCTTTCAAG GCTGGCTTTA TAGGTCTTGC CTCACTGTAT CCAGCAATCC AAACCTTTACC      180
CTATCCCACT CAGGACTGCA CACCTCATAT TGAAAGACAT ACCTTAGAAC CAGACTCCCC      240
AAACCTTACA AATATCCCAC CCTTGACTCC CGTTCTCGAG                                     280

```

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

```

GAATTCTAGA CCTGCCTCGA GCGCCACACA GTGACTGCCG GGTAAAGTTG TGAATTACG      60
TCCCTGGA CT CACCCCTGC CTCCTCGCC GAGTCCTGGC CATAAAGGGC CGCGCCACCA      120
CCCTGCCCTG ACCCTCCCA ACTCTCCCTG TCTCTCTTT CATTCTTCCC CTCTTTCCTT      180
TTCCCTCTCT TTCCCACTT CGATATGAGC TGCTTCTTAA CGGTATGAGA TTATTTNACT      240
CCTTCTTCTT CCTTCCCTT CCTGTCCTGC CTGGCCTAGA GAGGTGCCCT GCCTGTCCCT      300
CCTGCACCCA CCGTCCTTTT CCAAGCATGA ACAGTGGGAC AGGCCCCAGG AGATGGGTGC      360
CAGGGAGCAG AAGGGGGAGC CTTCAGGCCT GGACAAAACG AAACACCCCC CCAAAAAAAG      420
NAAACCCACG ACTCGAG                                         437

```

(2) INFORMATION FOR SEQ ID NO:12:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 264 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

```

GTTTCTTCTA AGTAGATCTT CCTTCCCAT TAACTAGGT TTTCTACTGC AAGATATTTT      60
GTGCATTGCT GTTTTAAACC CTTTAAACAG CGAATCATAG CAGTCTAAGA AGTCTTCTGA      120
ACCATCCTGG ACTCTTGCTG TGATTTAAAT TTGTGTCTAC AAGTTCTCTG ACATTCTTCC      180
CACCAAGAGG TAGAGTCTGT TTCCCTCCC TTTGAACCTA GGTAGGCCTT TGTTACTGCC      240
TTGATGAATA CAATGAGACT CGAG                                         264

```

(2) INFORMATION FOR SEQ ID NO:13:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```

GATTTTTTAC CCAAAGCTCT GGAATTGTAC ATTTATTTT TAAACTCAA AGAGGGAAAG      60
AGCCTTGAT CATATGTGAA CATTGTATCA TAGGTAATGT TGTACAGACC CTTTTATACA      120
GTGATCTGTC TTGTTCTGTC AGCAAAAATC CTCTATGGAC ATAGGAGGTG CTGTGTCCCA      180
TGCCCTCTTG CCCTGACAGT GTCCCATGGG CCCCCTTCTG CTCCCTGCCC CCTCCCTGCT      240
ACTGCTGATG CACTCCCCC CCTCGAG                                         267

```

(2) INFORMATION FOR SEQ ID NO:14:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GAATTCGGCC	TTCATGGCCT	ATTTTTTATT	TGTTTTGTTT	TGTTTTGTGG	GGATGGGGTT	60
TTGCCGTGTT	CCCCAGGCTG	GTTTCGAATT	TTTGGGCTTA	TGCAATCCAC	CCACCTTGGC	120
CTCCCAAAGT	GCAGGGATTA	CAGGCATGAG	CCATCTTGCT	GGGCCACCTT	TTTCTTCTCT	180
TTTAACAAAT	TCAGCAATTT	TTCAGTCCCA	GAAATCTGTA	AATACATTTT	TTGTGGAAAA	240
ATACAATGGG	AATGGCATCA	AAAGATGGTT	TCTATTAGGA	ATGGGAACAG	GTAACAGTTT	300
TCCCTGCCAC	CTCAACAATC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GGGCTGGCAG	GCGGGCCAAA	GGTAATGAAG	CAAAGAGAGA	GGGAAAAGAC	GTGTGAAAAT	60
TGCAGAGGGG	GTGACCGAGG	GAAACACGTG	AGCGTGATAA	TGACAGAAAA	ACCACGGAAG	120
GAGCAAACCT	GGGCAGGGGG	TGGGAAACCC	GGGCCGTTTC	CAGGGAGCAC	AGGCAGACTC	180
AGAGGTAACA	CTCAAAGCA	ACAACAGAAG	CAAGGAGGAA	GTGGGAAAAT	ATTTTTAATG	240
TGCTACAACG	AAACAGCTGC	CTGAATTCTA	TATACCCTCT	GAAAATAATC	TGCACATAAA	300
ATGGGAAAGC	TTCACCGCAG	CAGACCCAC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

GAATTCGGCC	TTCATGGCCT	ATGCTTCTTC	CACGCACCAC	CACCACCACC	ACCACCATCA	60
TGGCCATAGC	CACGGTGGCC	TGGGGGTGCT	GCCTGATGGG	CAGTCCAAGC	TCCAGGCCCT	120
GCATGCCCAG	TATTGCCAAG	GACCGGGCCC	TGCCCCGCCA	CCCTACCTCC	CACCCCAGCA	180
GCCCTCTCTT	CCCCACCTC	CCCAGCAGCC	CCCACCCTTG	CCCCACCTGG	GCTCCATTCC	240
ACCGCCTCCC	GCCTCAGCCC	CACCTGTGGG	GCCACATCGC	CACTTCCACG	CCCATGGCCC	300
AGTCCCAGGG	CCCCAACACT	ATACCTTGGG	CCGGCCAGGC	AGGGCACCCA	GACGGGGGGC	360
TGGAGGACAC	CCTCAGTTTG	CTCCACATGG	CCGCCACCCC	CTGCACCAGC	CCACATCCCC	420
ACTGCCCCCTG	TACAGTCCTG	CCCCCCAGCA	CCCTCCAGCC	CACAAACAGG	GCCCTAAGCA	480
CTTCATCTTC	AGCCACCACC	CATCTCGAG				509

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:


```

GAATTCGGCC TTCATGGCCT AAAGATGGCG GAGAACAGCG GTCGCGCCGG CAAGAGCAGC      60
GGGAGCGGCG CGGGGAAGGG GGCGGTGTCC GCAGAGCAGG TGATTGCTGG CTTCAACCGC      120
CTTCGGCAGG AACAGCGAGG CCTGGCATCC AAAGCAGCTG AGTTGGAGAT GGAGTTGAAT      180
GAGCACAGCC TAGTGATCGA TACACTGAAG GAGGTAGATG AACTCGTAA GTGCTACCGC      240
ATGGTTGGAG GAGTGCTGGT GGAGCGAACT GTCAAAGAGG TGCTGCCCCG TTTGGAGAAC      300
AACAAGGAGC AGATACAGAA GATCATTGAG AACTGACAC AAGCAACTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

```

GAATTCGGCC AAAGAGGCCT AGCTAGGTTT TGAAGCTTCT GAGTTCTGCA GCCTCACCTC      60
TGAGAAAACC TCTTGCCAC CAATACCATG AAGCTCTGCG TGACTGTCCT GTCTCTCCTC      120
GTGCTAGTAG CTGCCTTCTG CTCTCTAGCA CTCTCAGCAC CAATGGGCTC AGTCCCCCCC      180
CCCGTACACG CCTCGAGGCA GGTGCGAG              207

```

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

```

GAATTCGGCC TTCATGGCCT AGGCGGGACT AACACAGGGT TGTCATCTTT TCCTTTTGCC      60
AAGAAAGAAC ATTAATATGT ACTACCAGCA TCTGCCATCA CTAGCATTTT ATAAAAAGAG      120
GTTCTGTTAG CAACAGAGTA GAAACTGTAG GAAAGCATCT CAGAACAATAA CTAAGTTGAA      180
TAAATTCACC TAATAAAAT GCCTTGGTCT AGGATTCCCT TTCTTCATCA AAAGCTGCAA      240
GAGAAAGCCA CTGCTTACCT GATGCCGATT TACTGGTCAT TGGGGTGGGC AGGTTTGGTT      300
CTCGAG              306

```

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

```

GGTCTCACTT GTCTCATCCT GTCGCCAGG CTGGAATGCA GTGGTATGAT CTCAGCTCAC      60
TGCAACCTCA GCCTCCTGGG TTCAAGTGAT TATCCTGCCT CAGCCTCCAA GTANCTGGGA      120
CTATAAGCAC ACATCACCAC ACCCAGCCAA TTTTTTTGAA TTTTAAATAG GGTTTCACTA      180
TGTTGGCCAG GCTGGTTGAA CTCCTATCCT CAAGCGATCC ACCCACCTCG GCCTCCCGAA      240

```

```

GTGCTGGGAT TACCTGAGCC ACCGTGCCCA GCCATTTC A CAGTACTTTT TATTTAACCC      300
TATCGTGCTA GGGCACCATG CAATATACAG CTATTTTCATT TTCCTTTTGT CTCTGTTTCT      360
TAGGTGGTCT CGAG                                     374

```

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

```

GCAATGGCAG GAATTCGAAA TATTGCATA TGGTTCTTTT GGATTAGATT ATATAAAATC      60
AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTCTCTCT GCATGATACT TCTGCTTATT      120
GTCCTTCACA CTAGCTACAT GATTATAGT CTGCTCCCC AATATGTTAT GTATGGAAGC      180
CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCTT      240
TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTAAGT TACCCGGACG      300
CTCGAG                                     306

```

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

```

GGTAGAGATA ACAAACAGG ATACCAAAGT TGAGCTGGAG ACTTACAAGC AAACCTCGGCA      60
AGGTCTGGAT GAAATGTACA GTGATGTGTG GAAGCAGCTA AAAGAGGAGA AGAAAGTCCG      120
GTTGGAAC TGAAAGAAG TGGAGTTACA AATTGGAATG AAAACCGAAA TGGAAATTGC      180
AATGAAGTTA CTGGAAAAGG ACACCCACGA GAAGCAGGAC AACTAGTTG CCCTCCGCCA      240
GCAGCTGGAA GAAGTCAAAG CGATTAATTT ACAGATGTTT CACAAAGCTC AGAATGCAGA      300
GAGCAGTTTG CAGCAGAAGA ATGAAGCCAT CACGCTCGAG                                     340

```

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

```

GAATTCGGCC AAAGAGGCCT AGATTTTAAA TTTGTTTGAT ACCTGCTGTG TATTCCTTGC      60
ATACCCAGCA CATTGTTGCC CATATTGTTG ACATGTAGTA TGTATTATT ACAATTATAT      120
GATTAATGAA ATGTATCTTA TTTTTCAT GTATAGCATG TACAGTCACA CTCGAG      176

```

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```

GAATTCGGCC AAAGAGGCCT ATTCTTTGTC TTTTGCACAT GTTCTTTGAG TCTTAGTATC      60
TGTAACGTGG CGTACTCTC TCTATCATGG GGGGGCATGT TTTGACATTA AATTGACTTT      120
TAAGAAAAAC ATGTCATAA CCTGAAGCTC AGCCACACAG TGACTTTTAA GGTTTATTT      180
AGACTTTACT GTTGTCTCA TGAGAGTAGG TACAGACTGC ATAAGGTTTA GAATCCCAGC      240
ATATGTCTGA AACGACGGA CTTTCACTGT GATTCCACC AGAGAAATTA TAGCAGAGTG      300
GCTGAGCATG TGCTCTGAG CCAGGCCCA GCTCTGCTGC TGACGAGCTG TGTGGTCTG      360
GGCAGAGTGG TCTCCGAGT CCAGTCCCTC CTCTGTAAAA TGGGCTTACT CGAG          414

```

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```

GAATTCGGCC AAAGAGGCCT AAACATATAC CTAGTCTATA CTCTCTCTTA TCTCTGAACA      60
CTTTTCATCT GGAGCTATTA ATGCCCTCTA GCCTTTATTA TAATTATCAC ATATAATTAT      120
GCCTTTTCTC CTCAAAATTA TCTGTTGGAG TCATCTTATA GTAGAGTCTT TACAGAACAC      180
AAAGCATTCA ATCACTTTAT TTCAGACACC AACCTTGTTT TTGATGAACA TATGTTAGTC      240
TTAAGCCATC TAAAGTAATG CTAATGTGGG ATCTTATGGA AGACTACTGG TAATACAGGA      300
AAAAAAGTGG CAAAGAAATC TGACACGTTT GGCAATTATT CCTGAGGCTC TGACCTCTCA      360
ATTGTTGAGT GTTGGAGGTC ACAGTAAACA AACCATATAA AGATCATGTT GAAAGTCAAC      420
ATTATTAATA TACCATACTT GAAGGATATG TGTTTATTGT CTCACGTGTC CATGTGAAGA      480
GACCACCGTC CCTCGAG          497

```

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

```

GAATTCGGCC AAAGAGGCCT AGTTTTTGAT GAATTCTGT TATTTACTTA TAACTAGAGT      60
TTGAATGTTT ATTGGGAAAA CTTAATCATG ATCATCTACT GGTGGCTCGA G          111

```

(2) INFORMATION FOR SEQ ID NO:27:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GAATTCGGCC	AAAGAGGCCT	ATGCAATTCT	GACCAGGAAG	CTCCTCTTTA	ATTGGAAATT	60
CTTAGAAAGG	TATGGAGCAA	AGGAGATCCC	AGCAAACATT	CCGGCATCTA	CTGCTCTTGG	120
GTTTTTCTG	TGTTGGTTTT	TTTTGTTTTG	TTTTGTTTAT	GAGATGGAGT	CTCACTCTGT	180
CGCCCAGGCT	GGAGTGCAGT	GGCGCAATCT	CAGCTCACTG	CAATCTCCAC	CTCCAGAGTT	240
CAAGTGAATA	TCCTGCCTCA	GCCTCTCAAA	CAGCTGGAAT	TACAGGTATA	CACCACCACA	300
CCGAGCTCGA	G					311

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 597 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GAATTCGGCC	AAAGAGGCCT	AAGTGCAGTG	GTGCGATTAT	AGCTCACTGT	AGCCTCAGAA	60
TCCTGGGGCTC	AAGCTGTCTC	CCCACCTAGC	CTCCCAAAGT	GCTGGGACTA	CAGGCGTGTG	120
CCACGGGGCC	CAGCCATTTT	TTCGAATATT	TTCAATCTGC	AGTTGTTTGA	ATCCACAGAT	180
GCAGAACCCA	TTTCTAATGG	AGGGCTGACT	ATACCTTTCT	GATGACCTAA	ATATTTGTGT	240
CCACTATTGG	GACACTCCTT	TCTTAGTGTC	AAGGTTTGTG	AGAAATTGAG	GGCTGTTTGA	300
TGGGCAAAGA	TTTATTTATT	TATTTACTGG	CTTATCTACA	ATTGAGACAG	GGTCTCACTA	360
TGTTTCTCAG	GCTAGTTCTA	ACTCCTGGGC	TGAAGCAGTC	CTCCCATCTC	AGCCTCCCAG	420
AGTGCTGGGA	TTACAGGTGT	GACACACCAT	ACCCGGCAGA	GCAAAGAGTT	AAGAGTACAA	480
GACATTTGAT	CATCTTGAGG	AGTATTTACT	TCAGACTGAA	ACACCACATG	AAATTCTAGA	540
GTCCAACAGA	AAGTGAATA	ATTTTTTGCT	TTTCCCTTCT	TCCGCTACAT	CCTCGAG	597

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 506 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

GAATTCGGCC	AAAGAGGCCT	AATTCTAGAC	ATGCTCAGCT	TTGTGGATAC	GCGGACTTTG	60
TGCTGCTTG	CAGTAACCTT	ATGCCTAGCA	ACATGCCAAT	CTTTACAAGA	GGAAACTGTA	120
AGAAAGGGCC	CAGCCGGAGA	TAGAGGACCA	CGTGAGAAA	GGGGTCCACC	AGGCCCCCCA	180
GGCAGAGATG	GTGAAGATGG	TCCCACAGGC	CCTCCTGGTC	CACCTGGTCC	TCCTGGCCCC	240
CTGGTCTCGG	TGGGAACTTT	GCTGCTCAGT	ATGATGGAAA	AGGAGTTGGA	CTTGGCCCTG	300
GACCAATGGG	CTTAATGGGA	CCTAGAGGCC	CACCTGGTGC	AGCTGGAGCC	CCAGGCCCTC	360
AAGGTTTCCA	AGGACCTGCT	GGTGAGCCTG	GTGAACCTGG	TCAAACCTGGT	CCTGCAGGTG	420
GTGCTGGTCC	AGCTGGCCCT	CCTGGCAAGG	CTGGTGAAGA	TGGTCAACCT	GGAAAACCCG	480
GACGACCTGG	TGAGAGAGGC	CTCGAG				506

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

```

GAATTCGGCC AAAGAGGCCT AGTCTGTGGT CATTTTCAAC TCTCATTTAT AGGATTCTAA      60
AAGGGCACTA CATTACTCCA CTCCCTTATC TAAAATAAAT TTAAAATTCA TCGGAATTTG      120
TCCAGTCCTC CATCACTGGA AAATGTACAG ATTCCTTCTC TGGAAATATC TAAAGAAAAG      180
TACAGCTAAT GTTCCCCCAT TTCGTGTTGT TTTGTTGCTG CTTTAACTAT GAACTCATCT      240
GGCCGGGCGC AGTGACCAAG CCGCCGGGAG CTGGGGAGAG ACGCACCGGG GCGGCGACTG      300
GGCCAGGAGA CCAGAACACT CGAG                                         324

```

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

```

GAATTCGGCC AAAGAGGCCT AGGAGCAGAT TCCTCATGGT GCTTGTTTAT TATATATATT      60
TAATCCTGCT TGACACTTTA CCCAAGGGAG ATGGTCCCTT TTATCAGTTG AATGTTAGCA      120
GCGTTATTTC AGAGTGTGGT GACTGGTTAG AGAACTCAT GTACTCAACC AGCCACAGTT      180
TCAAACAAAA TTTTATGTG CAAAGGACAG CAACCTTCTT GTATGTTAA CCACCAGTAC      240
TCGAG                                         245

```

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

```

GAATTCGGCC AAAGAGGCCT AGGTGCTTTG GTTTTTGCTT TTTTAGTCAT CCCCATGAGA      60
ATAATAAACT CCATGAGGGC AGCAACTTGG CTGGCCTGTG TGCCAGTGCT GGGGACATCA      120
CTGAGAAATG AAGGCCCAT TGGCAGGCTA TTTTGTAGCA AGATTCTGA GGCCCAATCG      180
TTGGGTGATG AGATGGACCC GAGGTATTTC ACTCCAGCTC TCGAG                                         225

```

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

```
GCCAAAGAGG CCTAGAGAGC TCTGGGGGGC AACCTGGAGG TCTGAAAAGA GGAGCCAGAG      60
AAGGTGGTAC CAGGCTTCCT GGTGAGAACC GGCCTGGAGC TCCTTCCCTT CCCCCTGGCC      120
TGAGAGGTTG CTTTAAAGTC TTCCACCCTT TGTTCATCT GCCTGCCAAC CCATCGGAAA      180
GGAATCCACA TCATATTGGA GATGACCCCA TCAACCCAG GGCTCCAGCA CTACCAAGTT      240
GGAATTCAC GCCCGGAGT GGGGTAGAGG AAGACGAGAC AGGACGAGGC AGAAAAGCAC      300
ATTTTAAAAA CCAGACAAGA TGGCTAGGCC ATCACCACC AACCGACTTA CCTTACATTT      360
TTGTAGGTAA TTCCCCCAA ATCTTGATT TTTTTCCT CAATTATCCT TAAAAAATA      420
AGAAAACACA TTCAAACCC ACTCGAG      447
```

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 402 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

```
GCGATTGAAT TCTAGACCAT GCCTGCTCTG GGCCAGCTC TTCTCCAGGC TCTCTGGGCC      60
GGGTGGGTCC TCACCCTCCA GCCCTTCCA CCAACTGCAT TCACTCCAA TGGCAGTAT      120
CTGCAGCACC TGGCAAGGGA CCCACCTCA GGACCCCTCT ACCTGGGGG TACCAACTTC      180
CTGTTCCAGC TGAGCCCTGG GCTGCAGCTG GAGGCCACAG TGTCCACCG CCCTGTGCTA      240
GACAGCAGGG ACTGCCTGCC ACCTGTGATG CCTGATGAGT GCCCCAGGC CCAGCCTACC      300
AACAAACCGA ATCAGCTGCT CCGGTGAGC CCAGGGGCC TGGTGGTATG CGGGAGCGTG      360
CACCAGGGG TCTGTGAACA GCGCGCCTG GGCAGCTCG AG      402
```

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 307 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```
GAATTCGGCC AAAGAGGCCT AGTGAAGAT TTGGGTACTG TCTTTAATAA ATCAATCAAT      60
CGACTCTTAT TTCAAGGAGA AAGTTCTATG TTATATGTTG AAGGTGAACA GATCATATTT      120
AGAGGATATA ACAATTAGAA ATCTAGAAAA TAATTATCAC TTTTATAAAA TTTTGTAGTCA      180
ACTGTACAAA TAATTACATA AAACATCAAT TAATTATGCT TAAAAATCAC TAATGTTTAT      240
AATATATAAT CACTATTTGT AATCAAAAGT TTAATTTTAT GCCAAAAAT AAAAAATGCT      300
TACTCGA      307
```

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 324 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

GAATTCGGCC AAAGAGGCCT ACTTCCATAA CCGTGCTTTT GACGTTAAAA ATTTTAAATT	60
CAGCCTTTTG GAGAACACTA AGTATCTTAG TGTGTTTTTA CTTACTATAA TAATATTATT	120
GACCTAGTGT AATATTACTG CCATATGGAC CTCAAGGGTA CTTTCTGAT AAATTTCTGT	180
TATGGTTTCA TAATTAAACA AAAGGATAAT ATACAGAGTT GTGGAGTTTT TTTGGTTTTG	240
TTTTGTTTTG AGATAGCCTG GGCAACGAGT GAAACTCTGT CACACACACA CACACACACA	300
CACAGACACA CACCAAATCT CGAG	324

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 426 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

GAATTCGGCT TCATGGCCTA CAAGAAGATG AAGAAGATTG TGGATGCCCT GATCAAGTAC	60
AAGGACAGCA GTGGACGTCA GCTCAGCGAG GTCTTCATCC AGCTGCCCTC GCGAAAGGAG	120
CTGCCCAGT ACTACGAGCT CATCCGCAAG CCCGTGGACT TCAAGAAGAT AAAGGAGCGC	180
ATTGCAACC ACAAGTACCG CAGCCTCAAC GACCTAGAGA AGGACGTCAT GCTCCTGTGC	240
CAGAACGCAC AGACCTTCAA CCTGGAGGGC TCCCTGATCT ATGAAGACTC CATCGTCTTG	300
CAGTCGGTCT TCACCAGCGT GCGGCAGAAA ATCGAGAAGG AGGATGACAG TGAAGGCGAG	360
GAGAGTGAGG AGGAGGAAGA GGGCGAGGAG GAAGGCTCCG AATCCGAATC TCGGTCCAGT	420
CTCGAG	426

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

GAATTCGGCC TTCATGGCCA ACACATAATC CACGCTCATC TTGCAAAGCG CTATTTTCAGG	60
CACATCATTG GAATACAGGA AGTAGCCCTG CACCTGCCAG TGAGCTCGCC ATTCACTGAT	120
TGGAAGAGTG ACCTGGCATC TTGGAAATCA TTGTGTGTCT TCAGGAGAAT GTGCAGTGTC	180
TTGTAACAAC TAATTATAAT GCAAATTAGG GCTACATTGT AATCTGCTTT GTTAATGAAA	240
ATGATAAAAC AGAATATTGA CAAGCTAGGA CACCTGTGGT ATCTTTAATT GTATCTCCTT	300
CAGAAGTTTG CTTCTTATGG TATAATAAAG TATGGAAGAA TATTGAGTAT ATGTTTACTC	360
TGGGCCTGGG AGAACTTAAC TTTCTAGAGC AGTTTGTGTA CTTGTGTGCA ATGGGGAGAG	420
GTACCATGAT GACACTCACA GGGAGCCACT GTTCACTGAC ACTTGAAGG CCCTGCCTCG	480
AG	482

(2) INFORMATION FOR SEQ ID NO:39:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```

GTGTTTGCCC ACACCCTCCT TGAATTTAAC TGCCACAATC TATCCGCAGA TGTGTTTGT      60
TCTGTTTCTT GTTTTCACT AGCGTTTTCG TTGCTTCCTC TGAAGCCAGA GGGTGAAAGG      120
CCCTAGCAAA GTTAGTTATC AGTCAACTGA TGATAACTGT GATCCTTAAA GATGAATTCC      180
CAGCCTGAGG TGACACACAG AGGTTTCAGCA GACGTCTCAG GATCTGTCAC ATGTCATGTT      240
GCTTGGTGTG AAGATGGAAG AACAAAGTCC ACATCAGTTT CTGCTCCTTC AACAGTGTG      300
TCGATATGAA ACATTGAGAT TTGGCAGAAA CATGTGCCTA GTTTGCAGCA CCAAATACTC      360
GAG

```

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```

GAATTCGGCC TTCATGGCCT AAAGGGATAT TCACTCAAAT CCCTAAGTAT TTCAGAAACA      60
GCCTGAGAGC AAGTCCTTGG CTTCGCTTTC TAGTTTTTAA AGGCTTTTAA CTGTTTAGTC      120
TGAGATTCCC CTAAAAGTTC CAGGAAAGCA AACTCAAAAA GAGCCTAGGT GGTCAATCAT      180
TATTTTGGCT GCGTTTATAT AAATAATCAG GCCAAGTTAA TGAGACTAAA CTTATTTTGC      240
AAGCAAATCA GTCTTTGCTT ATTTTGGTA GGAATGGGGG TAAATGGAGA GAGAGAAATT      300
ATGTTTCAGA AGAAAATAT AGCACACCAA CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```

GAATTCGGCC TTCATGGCCT AGTGGGAAAC ATTATTTCAA GACATTAGGG ATAAGAATGC      60
CAGTTGCTAC TGAGTTGGTT ATTGTTTCAA GGATTTATCA ATACATAGAG CAAATAATTA      120
TGTTTTGCTT TGTCTTATTT TTATTTCTTT ACTTTAGAAA CAGTACAGCT ACTTACAAAT      180
CAAGTTTAGA ACTCTCAGGT TATCTTAAAT CTGAAGCTTC TACCTTCCTA AGAACAAAAC      240
ACCGGCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:42:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GTTCAACCAG	TTCAAATACT	TTTTCAACCT	CTATTTCTTA	CTTCTTGCCT	GCTCTCAGTT	60
TGTTCCCGAA	ATGAGACTTG	GTGCACTCTA	TACCTACTGG	GTTCCCCTGG	GCTTCGTGCT	120
GGCCGTCCT	GTCATCCGTG	AGGCGGTGGA	GGAGATCCGA	TGCTACGTGC	GGGACAAGGA	180
AGTCAACTCC	CAGGTCTACA	GCCGGCTCAC	AGCACGAGGC	ACAGTGAAGG	TGAAGAGTTC	240
TAACATCCAA	GTTGGAGCCC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:43:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 437 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GAATTCGGCC	TTCATGGCCT	AAGATGATTG	TGCTATTATT	GTTTGCCTTG	CTCTGGATGG	60
TGGAAGGAGT	CTTTTCCCGAG	CTTCACTACA	CGGTACAGGA	GGAGCAGGAA	CATGGCACTT	120
TCGTGGGGAA	TATCGCTGAA	GATCTGGGTC	TGGACATTAC	AAAACCTTCG	GCTCGCGGGT	180
TTCAGACGGT	GCCCAACTCA	AGGACCCCTT	ACTTAGACCT	CAACCTGGAG	ACAGGGGTGC	240
TGTACGTGAA	CGAGAAAATA	GACCGCGAAC	AAATCTGCAA	ACAGAGCCCC	TCCTGTGTCC	300
TGCACCTGGA	GGTCTTTCTG	GAGAACCCCC	TGGAGCTGTT	CCAGGTGGAG	ATCGAGGTGC	360
TGGACATTAA	TGACAACCCC	CCCTCTTTCC	CGGAGCCAGA	CCTGACGGTG	GAAATCTCTG	420
AGGGCGCCAC	ACTCGAG					437

(2) INFORMATION FOR SEQ ID NO:44:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 242 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCGGCC	TTCATGGCCT	AGTACCTTAA	AAACTTTGGA	AATAATAATA	ATAATAATAA	60
ACAAAAAATA	ATCCCAAACC	CCGTAAAGTTT	AACTTTCTAT	GCTTTGGCTG	TTTTTGTTT	120
ATTTTTTGTT	TTTGAAGG	GGTCTCGCTC	TGTCGCCAG	AATGGAGTGC	AGTGGCTTAA	180
TCAGGGCTCA	TTGCAGCCTC	GACCTCCTTG	GTTGCGGCGA	TCCTCCTCCC	TCCCACTCG	240
AG						242

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 264 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

```

AATTAAATTA AATTAAATC TTTGTTACAA ACTATGAAAA TGAATATAAG TAAATTTTCAT      60
ATCATTTCTT TTCTAGATTT ATTATCTAGG ATAGATTTGG ATGAACTAAT GAAAAAAGAT      120
GAACCGCCTC TTGATTTTCC TGATACCTCG GAAGGATTTG AATATGCTTT TAATGAAAAAG      180
GGACAGTTAA GACACATAAA AACTGGGGAA CCATTGTTT TTAACACCG GGAAGATTTA      240
CACAGATGGA ACCAGAAGCT CGAG                                     264

```

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

```

GAATTCGGCC TTCATGGCCT AACCTGGAGA AACTATTTAA GTTGGATGAA GCAAGTGCCC      60
AGCTCCTTGC TTATAAGGAA AAAGGCCATT CTCAGAGTTC ACAATTTTCC TCTGATCAAG      120
AAATAGCTCA TCTGCTGCCT GAAAATGTGA GTGCGCTCCC AGCTACGGTG GCAGTTGCTT      180
CTCCACATAC CACCTCGGCT ACTCCAAAGC CCGCCACCCT TCTACCCACC AATGCTTCAG      240
TGACACCTTC TGGGACTTCC CAGCCACAGC TGGCCACCAC AGCTCCACCT GTAACCACTG      300
TCACTTCTCA GCCTCCACG ACCCTCATT CTACAGTTT TACACGGGT GCGGCTACAC      360
TCCAAGCAAT GGCTACAACA GCAGTTCTGA CTACCACCTT TCAGGCACCA TAGTGACTCG      420
AG                                     422

```

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

```

GAATTCGGCC TTCATGGCCT ACCGAAGGGC ATCCCATCGG TTGGGTAGGT CATGGTTAAA      60
AAATCATCTC CTTTGGTTGC ATATTTAATT ATTTTCCACT ATTTTTCCT CACACAAAAT      120
GATTTTGCCC GGTACCCTTT TTGGGGGTGC ACAGTCCATG AGATGAATAT TGAATGGGGA      180
GACCTGGGTT CTAGTCTCGC ATTTACCAGT CAGGTTACAA TGCGACCTTG AGCAAGTCAC      240
TTCACCTCCC AGCGCCTCAG TTTCTCATT GTAAGATAGG AAAAGCCTTG TCATTTTAA      300
AATTTTATTT TTTGCATATA CCTCATGGCG AACTCGAG                                     338

```

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

```

GAATTCGGCC TTCATGGCCT ACTATGCTCT GCACGTGGGT CATTTCTTAC TGGTTTCTAA      60
AAGCCTTTCA TTTTCTGCCT GTACACAATA GCCCCCTTCC TCCATTGTTT TTAGGATCCT      120
TTTTCTCTT ACCAGCTGTT AACCTGGAAG TATTTCTTCT TCATCCCGAA TCTCCCATGT      180
CCTCCCCACT TCTATTTGTT TCCATCCAAT GTGGATTCAT GATCATTTTA TGGATTTTAA      240
ACTACTCTGG GGCTACCCCTC GAG                                              263

```

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

```

GAATTCGGCC TTCATGGCCT AGAAACACAT GTGATCTGTA CTCATGAGAA CCTGTAGTTA      60
ACTATACGAG CCTTGCTGTG CATTTTGTTT TTATCTGAGC CTGTCTTTCA ATGTCCTATC      120
CCTTGAGAGA ACTGAGGGCT GAGAACCAAG CTTTCCGAAG CGGTCTGAGT GTCAGCGGTG      180
GTAGTGGTCT CTGGAGAAAA GAATGGAGAC AGGATAGGAC TTGGAGAAGA GTGAGTCATT      240
GTTACCCAGA AACCTGGAG AACACTGGAC TCGAG                                  275

```

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

```

GGGCGTTCTC ACGCCCGCAA CAATTCCTGA GTAGGGCCTT GCTTGAGTTC TTCGGAAAGT      60
CTCATCCACC CCCACATCGC CTCTTTAGGA AGTCACTTAA TGTGGGGCTT CATTATTTCC      120
ACATCCCTTT CCTTACTACT TGCTGCACT TCTTGAGAAA AAGACTGCAG AAAGGAGAGG      180
TGGGGCTTTC AGTAGAAACA AGCAAACCGC AGGTCCCTGT GGGGGGACTC TCCAGGAAGA      240
AGGGTAATTT CCTGCCTCCT TAAATTGGCT GCTACTGTCA GTTATTTTGC TCCCAACCCC      300
AGAGCTTCAC TTGCTCCTTC ACTTCCAGT TCCGCAAGAA CCGTGGGCGA CAGTTATGGA      360
GAAGCGTCTG CAGGAGGCTC AGCTGTACAA GGAGGAAGGG AACCAGCGCT ACCGGGAAGG      420
GAAGTACCGA GATGCTGTGA GTAGGTACCA TCGAGCTCTG CTTGAGCTGC GGGGTCTGGA      480
TCCGAGTCTG CCCTCTCCGT TACCTAATCT CGGACCTCAG GGCCCGGCC TCACGCCTGA      540
ACGACCTGCC TCGAG                                              555

```

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

GTGAAGATGG	ACTGCTCTGG	GGCCCATGTG	CAAGTGACCT	GTGCCAAGCT	CATCTCCAGG	60
ACAGGCCACC	TGATGAAGCT	TCTCAGTGGG	CAGCAGGAAG	TAAAGGCATC	CAAGATAGAA	120
TGGGATACGG	ACCAATGGAA	GATTGAGAAC	TACATTAATG	AGAGCACAGA	AGCCAGAGT	180
GAACAGAAAG	AGAAGTCGCT	TGAGCTCAAA	AAAGAAGTTC	CAGGATATGG	CTATACTGAC	240
AAACTCATCT	TGGCATTAAAT	TGTTACTGGA	ATACTAACGA	TTTTGATTAT	ACTTTTCTGC	300
CTCATTGTGA	TATGTTGTCA	CCGAAGGTCA	TTACAAGAAG	ATGAAGAAGG	ATCACTCGAG	360

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

GAATTCGGCC	TTCATGGCCT	AGCTCCTGCG	TAAAGGAGCA	TGAGAGCGTG	GGAGTTTTCG	60
AGTGCCCGTG	GGGTTCTTCG	TCGCGTCTCG	GTCGGGCGTC	GCTTTCTGCA	GCTCCTGTCA	120
GGGAGCGCGA	GGCCTGTTAT	TAACCGCGGA	GCGCTTTGTC	ACGAANTCCC	TGTGGCGTCT	180
TGAAGAAGGC	ATTCCCCACC	CGCCAAATGG	CGTCCATGCC	CCCGACGCCC	GAGGCCCAGG	240
AGAGTCGAGG	TACCTTTTTC	GTCCAAGTTT	ATNGCTGCTT	TCGGTCTCTG	CCTGACCCCN	300
TCCTTTGGAG	GAGAGTTGGG	CATGCCTGTT	GTGGTAGGAG	TGCTCNTGAG	CCCCAAATAG	360
CCCTTTGACC	AAGTGTTCTT	CGTTCCAAGA	CCACACACAT	AATGGTTTAC	CAACTTCNTT	420
CTTTCAGAAC	TACCAACTGG	GAGCAGGGAC	CTGTGGAGGA	ATCTCTGAGA	GAGTTTCTCA	480
ATGTCTTATC	TGTTTGTTTT	GTTTTGTTTG	GAGATAGGGT	CTGGCCTTGT	CGCTGGAGTG	540
TTGCTTGCTC	GGCTGGAGTG	CAGTGCTGAT	ATCATAGCTC	CGTCTGGAAC	TCAGGGAATC	600
CTTACGCCTC	AGCCTCTCGA	G				621

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

GAATTCGGCC	TTCATGGCCT	ACAATTTGGA	GCAAGGCTTA	GCAGAAGACG	GCGGCATGAG	60
CAGCGTGACT	CAGGAGGGCA	GACAAGCCTC	TATCCGGCTG	TGGAGGTCAC	GTCTGGGCCG	120
GGTGATGTAC	TCCATGGCAA	ACTGTCTGCT	CCTGATGAAG	GATTATGTGC	TGGCCGTGGA	180
GGCGTATCAT	TCGGTTATCA	AGTATTACCC	AGAGCAAGAG	CCCCAGCTGC	TCAGCGGCAT	240
CGGCCGGATT	TCCCTGCAGA	TTGGAGACAT	AAAAACAGCT	GAAAAGTATT	TTCAAGACGT	300
TGAGAAAGTA	ACACAGAAAT	TAGACGGACC	TCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:54:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

GAATTCGGCC AAAGAGGCCT ACATTACTGG GTTAGAAAAC AAAGAGGGAG TGCCCTGCAC	60
ATTTTCTTTT GTGCTTTTAA ATGTTTCTTA AGTTGGAACA GGTTCCTCG GGCCTGTTTT	120
GACTGATTGC TGGAGTGCAT TTGATAGTTA AAAATTACTA ATTGGTTTA TTTCCCTTCA	180
CACTCTGCCT CCCCTATTTC CCCCAATTGA CCTAAACCT CGAG	224

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 249 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

GATTTAATGC ATGCTAGCAA CAGCCTTAAC TTTGGATTCA GTTATTTGAA ACACTTTCC	60
GGCATCTTTC CTTTCTAAT GTTGTGGGT GGAAACCGGA TGGCAAATCA CTGTGAGCCG	120
GATACCTCAG CACAGTCCAC CTTGTGTGTG ACTTCACAAA TGGGGGACTT CACAAATGGG	180
GTAACCTGAAT GTTATTACTT TCAAATTTG ACATGGAGCA TTATGATCAA GGAAATGGAG	240
CAACTCGAG	249

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

GCTGCGCCGC ACCCTGAGAG ATGGTTGGTG CCATGTGGAA GGTGATTGTT TCGCTGGTCC	60
TGTTGATGCC TGGCCCCTGT GATGGGCTGT TTCACTCCCT ATACAGAAGT GTTCCATGC	120
CACCTAAGGG AGACTCAGGA CAGCCATTAT TTCTCACCCC TTACATTGAA GCTGGGAAGA	180
TCCAAAAGG AAGAGAATTG AGTTTGGTCG GTCCTTTCCC AGGACTGAAC ATGAAGAGTT	240
ATGCCGGCTA CCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 229 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

```

GAATTCTAGA CTTTGTCTCC AGAGCATTGC CTTTATAAGC AGATTGGCAC CAACAGTTCC      60
ATAGTTTAAC ATCTAGTTAA GCTACAAATA TAGTATAAGC ATTATTAGCA GCTGGTACTT      120
CTGCTAGGGG TTGTAAATTC CAGGTGTTAC ACTGACCTCA ATCCAATTTA CATAATTTAC      180
ATAAATGCAT CTCGGTGGAA AAATAATCAT TTTCTTGGA TATCTCGAG      229

```

(2) INFORMATION FOR SEQ ID NO:58:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

```

GAATTCGGCC TTCATGGCCT AACTGCTAT GTATGTTTTC TCCTTAATGA TGAAGAGTGT      60
AGATGATGCT AATAATAGTA GCTGATGTAC TGACTTTTAG CTGTGTGCAA AGCCATGTTC      120
AAAATACTTT ACAAGTGTTA ACTTGTTTGA TCTTCACAAC AACCCTAAGA AGTGGATATT      180
ATTAAAGTAG ATTTTGAAG ACTGATCTAT TTAATTATTA ATAGATCTGT CTCATTCCTT      240
TTTTCCCCCA ACTCGAG      257

```

(2) INFORMATION FOR SEQ ID NO:59:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

```

GAATTCGGCC TTCATGGCCT ACGCGTCTGC TTCGGAGACC GTAAGGATAT TGATGACCAT      60
GAGATCCCTG CTCAGAACCC CCTTCCTGTG TGGCCTGCTC TGGGCCTTTT GTGCCCCAGG      120
CGCCAGGGCC TTTTGTGCCC CAGGCGCCAG GGCTGAGGAG CCTGCAGCCA GCTTCTCCCA      180
ACCCGGCAGC ATGGGCCTGG ATAAGAACAC AGTATCACTC GAG      223

```

(2) INFORMATION FOR SEQ ID NO:60:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 171 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

```

GAATTCTAGA CCTGCATGTC CCAGTGTGAA ATTTAGCAC GGCATTTTCT GCATCCTTTC      60
ATGGCCATCC AAAGGATTCC GCTGCAGAAA TTATTGATGT GCTATTTTGT CTGTCTTGTG      120
ATGCAGGCTG CTTTGGGCCC CTGGGTCACT CTTCCAAGGC TGCAACTCGA G      171

```

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```

GAATTCGGCC TTCATGGCCT AAAAAGCAAA AGAAAAGTAA AAGGAAGAAA CAAGAACAAG      60
AAAAAAGATT ATATTGATTT TAAAATCATG CAAAAACTGC AACTCTGTGT TTATATTTAC      120
CTGTTTATGC TGATTGTTGC TGGTCCAGTG GATCTAAATG AGAACAGTGA GCAAAAAGAA      180
AATGTGGAAA AAGAGGGGCT GTGTAATGCA TGTACTTGGA GACAAAACAC TAAATCTTCA      240
AGAATAGAAG CCATTAAGAT ACAAATCCTC AGTAAACTTC GTCTGGAAAC AGCTCCTAAC      300
ATCAGCAAAG ATGTTATAAG ACAACTTTTA CTCGAG                                336

```

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```

GAATTCGGCC AAAGAGGCCT AGAAGAGCAA GCGCCATGTT GAAGCCATCA TTACCATTCA      60
CATCCCTCTT ATTCCTGCAG CTGCCCCTGC TGGGAGTGGG GCTGAACACG ACAATTCTGA      120
CGCCCAATGG GAATGAAGAC ACCACAGCTG ATTTCTTCCT GACCACTATG CCCACTGACT      180
CCCTCAGTGT TTCCACTCTG CACGCTCTCG AG                                212

```

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```

GAATTCGGCC TTCATGGTCT ATGCTACTCA GTTGGATCTA GCAGAAACAA AAGCTGAGTC      60
TGAGCAGTTG GCGCGAGGCC TTCTGGAAGA ACAGTATTTT GAATTGACGC AAGAAAGCAA      120
GAAAGCTGCT TCAAGAAATA GACAAGAGAT TACAGATAAA GATCACACTG TTAGTCGGCT      180
TGAAGAAGCA AACAGCATGC TAACCAAAGA TATTGAAATA TTAAGAAGAG AGAATGAAGA      240
GCTAACAGAG AAAATGAAGA AGGCAGAGGA AGAATATAAA CTGGAGAAGG AGGAGGAGAT      300
CAGTAATCTT AAGGCTGCCT TTGAAAAGAA TATCAACACT AAACTCGAG                                349

```

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

GCGGGCTAGT	CATGGCGTCC	CCGTCTCGGA	GACTGCAGAC	TAAACCAGTC	ATTACTTGTT	60
TCAAGAGCGT	TCTGCTAATC	TACACTTTTA	TTTCTGGATC	ACTGGCGTTA	TCCTTCTTGC	120
AGTTGGCATT	TGGGGCAAGG	TGAGCCTGGA	GAATTACTTT	TCTCTTTTAA	ATGAGAAGGC	180
CACCAATGTC	CCCTTCGTGC	TCATTGCTAC	TGGTACCGTC	ATTATTCTTT	TGGGCACCTT	240
TGGTTGTTT	GCTACCTGCC	GAGCTTCTGC	ATGGATGCTA	AAACTGTATG	CAATGTTTCT	300
GACTCTCGTT	TTTTTGGTCG	AACTGGTCGC	TGCCATCGTA	GGATTGTGTT	TCAGACATGA	360
GATTAAGAAC	AGCTTTAAGA	ATAATCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

GAATTCGGCC	TTCATGGCCT	AGGGAGTCTG	AAGCAATTTT	TGAAGAAGAC	CAAAAAGAAC	60
CACAAGACGA	TGAATGAAAA	GGCATGGAAG	CGTTGGTGCA	CACAAATCCT	CTCTGCCCTA	120
AGCTACCTGC	ACTCCTGTGA	CCCCCCCATC	ATCCATGGGA	ACCTGACCTG	TGACACCATC	180
TTCATCCAGC	ACAACGGACT	CATCAAGATT	GGCTCTGTGG	CTCCTGACAC	TATCAACAAT	240
CATGTGAAGA	CTTGTCGAGA	AGAGCAGAAG	AATCTACACT	TCTTTGCACC	AGAGTATGGA	300
GAAGTCACTA	ATGTGACAAC	AGCAGTGGAC	ATCTACTCCT	TTGGCATGTG	TGCACTGGAG	360
ATGGCAGTGC	TGGAGATTCA	GGGCAATGGA	GAGTCCTCAT	ATGTGCCACA	GGAAGCCATC	420
AGCAGTGCCA	TCCAGCTTCT	AGAAGACCCA	TTACAGAGGG	AGTTCATTCA	AAAGTGCGCTG	480
C						481

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

GAATTCGGCC	AAAGAGGCCT	ACGATTGAAT	TCTAGATCTG	CCCGTCTTGG	CCTCGCAAAG	60
TGCTGGGATT	ACAGGCGTGA	ACCACTGTGC	CTGGCATATT	TGTCTATTAA	TTTGCTTTTC	120
TTTAGATGTA	TTCTAGAGGG	GGGAAAATCA	GTAGAAGAAC	AGTTATGTAA	TTCTAACAAG	180
TTCTCCATGT	GTCTTGCCAT	CTNGCTTTT	CTCATCCTAT	CAGTACTGGA	TGAGAATGTT	240
TATTTCACTG	AACTTTGCCA	AAGAGTTTCA	ACATTTTTTT	GTTTAATCAT	AGGAGAAAAA	300
GGTTTATCTT	ATTTTTAAAA	ATTTTATTT	AATTCTTTCA	TTACAAATGA	AGTCCCAGAA	360
GTTGTATTTG	TTTCTTTAGG	CTGTTCTTAA	TTGTTTCATTG	GAACAGGCAG	GGTTTGAAGG	420
AGTGGGGATA	CTGGGAAAGC	CAGGGTGATG	AGAAAATAGG	AAAGGGGTCT	TGTCATTGGG	480
AGGCCACTAT	ACCAGTGGCC	CTTGTACCAG	GACTAATATG	GTACTTTGAA	GCTTTAAATT	540
CATTTCTTTA	TTCAATAATT	TAGGCATCC	CAGGATACTC	GAG		583

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```

GAATTCGGCC AAAGAGGCCT AGCTATCCGC TTTGCTATTT TAGTGGCATT ATCAAAATCA      60
CTGGAAGCAC CTGTNGTAAT ATGGTCGGTT CCAAATATAA GTCCTCTGC CACTCTTCCT      120
CCCATACTAA CATCCATTG TGCAAGCAGC TGGGCTCTAG TTTCATTCCA TCTGTCATTC      180
TCAGGTAACA GGGACACATG TCCAAGTGTG GGGCCCCGTG GCATGATTGT AGCTTTGTTG      240
ATAGGCATTG CATCTTTTGT GTAATATGCA ATAATGGCAT GACCAGATTC ATGATATGCT      300
GTGATGGTTT TGTTTTGTG ATCAATTTCC ACACTTCTTC TTTCAGGCCC CATTAGAATT      360
TTGTCTTTGG AAAACTCCAG CTCTTTCATG GTAACCATTT CTTTCCATC AACAGCTGCT      420
TTTAATGCAG CCTGGTTCAC AAGATTCTCC AACTCTGCTC CGGAAAAGCC AACAGTACCT      480
CGAG                                         484

```

(2) INFORMATION FOR SEQ ID NO:68:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```

GAATTCGGCC AAAGAGCCTA ATTGAATTCT AGACCGGCCT CATCGTTCTT TGCCTTCCTG      60
GTCACCATCT GCTACGCTGG AAATACATAT TTCAGTTTTA TAGCATGGAG ATCCAGGACC      120
ATACAGTGAT TTACCATTTT GATAATTAAA AGGAAAAAAA AAGGAAGACT CTCAGTGTA      180
AAACAGCTGT AGGTATAATG TATATTCCCA GAGAATTGTA TTAACTAAT TAATGTTTTT      240
TATATTCTTA AATTGCTCA CAAATTGTGG TTTGTTACAA TTAACTGGA TACTTATTG      300
CAAAGTGTTG TAGCTTATAA TGAAGTCTTA AGTATCTTAT TAATGTATTA ATGTCTTCAT      360
AGATCATATT TTCTTAGACA ATGTTTAAAT AGATAAATG CTAATATTGA GAATGTGTCA      420
AGTTTGTAAG CCTAACTTTT AAGATGCCAG AACTCGAG                                         458

```

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```

GAATTCGGCC AAAGAGGCCT ACGGCCAAAG AGGCCTAGGT GGTGATTGAC CTAAGAAAAA      60
AGTGTCTTAA ATATCTGGAT TCTATGGGAC AAAAGGGCCA CAGGATCTGT GAGATTCTCC      120
TTCAGTATTT ACAGGATGAA AGTAAGAACC GCTCGAG                                         157

```

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

```

GAATTCGGCC AAAGAGGCCT AGTGGACTGC TACTTCCCTT TAGCACTATA TACAAACATA      60
ACTGCTACTT CCCTTAGGCC CAGGATCAAA ATAATGATTC AGTTAAAAGT TGCTTGCCTA      120
ACAAAATTTC AAAATATGGA CTCTGTGAA TTGCTAAAAC ACATCCTTTT AACTAGGCAT      180
CTTTAAGTCT ATAGTATCTT TAAAGTTAAT TTCAAAATTT AGCAGAGCCT GGAACACAAA      240
TTATTCAGGA AATAATTCCT GAACCTACCT CTATCTTCAT AAAACGTATT GGGGCAAGAA      300
CTATTCTATT GAATTCTAGA CTTGACTCGA G              331

```

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

```

GAATTCGGCC AAAGAGGCCT ACCATCTGTC ACTAATATCA AAGGAGGGCC AAGGACACAG      60
CCCTGGGGGA ACTTACCAGG TCAACCCACA ATGGGTGAAT TTATAGTTTG TTAGTTAGTG      120
GTCAGTTACC AACTTCTCTG TCTGTCTAAT GCTTTGACTA AAATGTCCAG ATTATTTACC      180
TAGTTAACAA AATTAAAGAA GATTCTAAGA CCAGTTTAGC ATCATTTTCT CTGAAGTCCA      240
TAATGAATGT CTGTTAAACT CTCGTCACTC TTATTTAGGT GCTTTTGGGT CATTTGTGTG      300
AGGTTTCATT TCCCAAATCA ATGTCACATA TACGTCTGTA ACTTGTGTTA TCAGCTTCCT      360
TCCTAGGGCT TTAAGTTCTT TTCAGTCTTA TAGCATTCTT TCCATTTTCC TTTCAGTTCA      420
CTCCAATAAA AGCTCGACAA ACTCCTGGGA GCCCCTTGGT GCTCGAG              467

```

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

```

GAATTCGGCC AAAGAGGCCT ACGATTGAAG TCTAGATGCA CACATTCAGC TTCTGTCTCA      60
GTCCTGAGAG TGTTGTGTGT TTATTGGCTG ATGAGTTATT TCCACATATC ACATGTATAA      120
GGTATTTGAA TGAAGGTGCT TTGTAGTCAT GACACACTAC TCTTTTACTA ATTATTAATA      180
TCTTAAGATT ACAATTTGAG AGGTAGAGAT GGTATTGTTT TTAATGGGTG TGGGGGGTGG      240
TGATGATAGG TATTTTACC CTGGTAAGTG ACCTACTAGG TTTTATTAAG TGTGCAACT      300
TGTCAGTGT GTGATGGGA TCTCGAG              327

```

(2) INFORMATION FOR SEQ ID NO:73:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

```
GAATTCGGCC AAAGAGGCCT AGTGGTGGTA TGTATTTGAG TTCACAGTAT TTGTTTATA      60
GCAGTTTTCG AAGCACATAC TGTGCCACGG ATTTTCCCAC ATTATTTTGA GACAAGGGAA      120
CACAGCCATC AAAACTGATA CCATGGCCGG GCGTGGTGGT GGGTGCCTGT AGTCCCAGCT      180
ACTTGGGAAC TCGGGACATT CTCGAG                                         206
```

(2) INFORMATION FOR SEQ ID NO:74:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```
GAATTCGGCC AAAGAGGCCT CCACCATGCC CGGCCTCAAC GATATTGATT CTTTGGGCTG      60
TAGTCAGTAT TGGATTATGA TCAATATTAT CACCATTTAT TTTGTTGCTC CAGTTCTTCC      120
AGCTGTGGCC AATCCTTCAG TTGGATTCTT GTGCCCCATC AACATTCTCC ATCCTTCTCT      180
CGAG                                         184
```

(2) INFORMATION FOR SEQ ID NO:75:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```
GAATTCGGCC AAAGAGGCCG ACTTTATTAT ACCATACATA CTATAGGTAC CTGGGCACAA      60
GATAGGTCAG GGGGTACTGT ACCCCTATTT ACATGCTTAA TCACATCATA AGGTTGCAGG      120
TGGTACTTGA AATCATCACT AATGAGACAG CAAATATGTT AGACTTGCTG GCCCAGCAAG      180
CCACAGAAAT AAGGATCACC ATCTATTAGA ATAGACTGGC TTCAAACCTCG AG          232
```

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

GAATTCGGCC	AAAGAGCCTA	CTAAAATTCC	TTGTTTTGTG	TTTTTAATAT	TCCATCGTTG	60
ATAGTTAATA	TTCTTTTNGA	GGTTTTGTTT	TAGACAAAGT	AATGTTTTTC	TGAAATGATT	120
CTAAGACAAT	TGATCAGAAA	TAGTCTCTGC	TTGTTTGGTT	TATGTTTGGT	CAGTTGTGCT	180
TTGATTATAG	ATGGTTCCTC	ATCTGAGATT	AAAGTGGGAC	AGAACTTCAA	AAGTAAAAGG	240
GTAATGTTC	GCTGTGATGC	TTATGTGGCA	CATGTGCTAG	TCCTTGATAG	TGGCGAGAAA	300
GATCTTAATT	GCTCAAAGGA	AGTACTCGAG				330

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

GAATTCGGCC	AAAGAGGCCT	ACAGTGCATT	ATGTTATTTT	GTTATCTCTG	CAGTAACTTT	60
CTATCATGTT	ATTIATTTTC	TTTGTCTTAT	TTAAAGCTTC	TGAGATTATG	GATTTTGTGTT	120
TCCTTCCCCTG	AAGTTAAGTG	TTATCATTCC	TATATAGTAC	TAAGCTGTCT	ACAGAATAGT	180
GGGAGTCTGC	CCTCTTGAGT	TGGGAAGATC	CTAGTTTGAA	TCTTGGCTGT	GCGACTTTAA	240
AGTTCATTAA	CTTCTCTTAG	CCTCAGTCAC	CTGAACTCTG	CAGTGGGGAT	CCTTATGCCT	300
CAGAGTGTCA	TTGGGAGGAC	TCACGAAAAT	ACGCTTGTAC	TTTGAGTTCA	GTACCTAGCC	360
TGTATGAGCC	AGCATTAAAG	GGGACAGTCA	TCACGCAGCG	CTTGCCACAC	AGCTCTCACG	420
CCACATCCTT	TGGCTACTGT	TTTGGTAAAT	CTTTACTAGT	AAATGTTTCT	TAAAAGCATT	480
TACATTTCATG	GACATGATTG	CCTCGAG				507

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

GAATTCGGCC	AAAGAGGCCT	AGATTGAATC	TAACCTTTTT	GCCTCTTCCC	AAGTAGCCTA	60
TTTGAGCTAG	AACAAAACCT	TGTTAGCCAT	TTTGGGAGAG	AATAGGGAAT	CTAGAGAATG	120
AAGATCTGCC	CGACCTGCCT	CGAG				144

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

```

GAATTCGGCC AAAGAGGCCT AACGACGGTA ATCAAGTTTT GCTCCAGAAG CATCAAGAAA    60
CTTAGCTACT GCTTCCAAAT CAGTACCGGT TTCAGTTAAG CCTTGAATAA TACAGTCTTG    120
AAACTGAGTA GGGTCAAACC TCTCTTTTTT ATCTCTTTTT CTAGTTTTAA AACGCTGGCC    180
TGATAGCGTT GGCTTTTGCT GCTTTTGATT ATTCATAAAA GACACCCGAA TTAAAGGCGA    240
AGAGGAAAGA GCCAGAAATC CCCGATGTAC CGGCAACTGC GGCGCTATCT CCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

```

GAATTCGGCC AAAGAGGCCT AGACTGCTGG TGGTGAAGT CTTTTCTTGT AGGTTGTGAG    60
GGCTGAAAAA GCCAATCTTA ATAGACATGA GGCTCATGTT TGCACAGTGT GCTCTCGAG    119

```

(2) INFORMATION FOR SEQ ID NO:81:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

```

GAATTCGGCC AAAGAGGCCT ACTCAGCTGC AAAAAAGCAT ATTTTCTGTG TTTCTGGACT    60
GCACTGTNGT CCTTGCCCTC ACATAGACAC TCAGACACCC TCACAAACAC AGTAGTCTAT    120
AGTTAGGATT AAAATAGGAT CTGAACATTC AAAAGAAAGC TTTGGAAAAA AAGAGCTGGC    180
TGGCCTAAAA ACCTAAATAT ATGATGAAGA TTGTAGGACT GTCTTCCCAA GCCCCATGTT    240
CATGGTGGGG CAATGGTTAT TTGGTTATTT TACTCAATTG GTTACTCTCA TTTGAAATGA    300
GGGAGGGACA TACAGAACTC GAG                                     323

```

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

```

GAATTCGGCC AAAGAGGCCT AGGCAAATCA GAACTCTTAA GTTGTTTCAT CCTTATTTTA    60
TTCTTAAAT AAAGAATTTT ATTTCAAATA CGGATTAATT TTTTCTCTGG GAAAAACAC    120
ACTGTAAAC ATAATTTTCT ACCTTTTAAA ACGTTTACAA ATTTATCCCA TCTTCTAACA    180
AGTTATGATA CTCATACCTG CCGAGGTTTC TCTAAATTTG TCGCTGGTCT TCTTTTTCCT    240

```

CCATTTCCAA GGCTTAAAGA TTTTACCAAT GGTGGATAGT TTCCCTTTTC TTTTGAAGGG	300
AGGTGTTTGG GAACCTGCTG TGGGGCCATC TGAGTTTGCT ATAGAAGCTT TGTCCAGTCC	350
GTCAACTGAG CCGGAGATGT GGACCCGGAG CGGGCGGCCC CTGCTCGAG	409

(2) INFORMATION FOR SEQ ID NO:83:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

GAATTCGGCC AAAGAGGCCT ATAAATATAT AATTGACTTA TTTATTAAAT TTAGGAGAAA	60
AAAAAAGTTT TCCTTGACAT TCAGCTCTAT TGGATTATT TCCATTAAAT TGCATCATGT	120
GTTATGTCTT GGTAACACT CCATTTCTTG TCTTGGTGGG CATCCTGTCT GTGTACCTGT	180
GCAGTACACT TTAATCATCA AGACTTCAAA GTGCTTTTGA GCTATCAAAT CTTGGGAGAG	240
TCCCATCTAG CATCTTAATA ATTATTTTTC CAAGTTCGTT ATAATTAACT CCTTTAACCT	300
CATCTCATTA AATCAATTTT GTATTATCAT TCTGTTGTTT TCTGGAAAGC AGCCAATTGT	360
TCAGCTCTTG AATCAGAATT TTCAAAGACT CACCTCTCTT ACCTGGGCTT GCACATATTT	420
GTCCTAAGTA ATTCTCTATC CCTTAAACCT CTGAGCCCTC GAG	463

(2) INFORMATION FOR SEQ ID NO:84:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC AAAGAGGCCT AATTTTGTAA AAAGGAATAT CATTCTTTGA TTTTAGATCT	60
TAGACATCAG GCACTGACAT AGAGCTTAGA TATGTTCTTA AGGTAGCTAA GCCATTATT	120
ATAGGATAGT CAGATAGGAT AGTTCTAGGA TTTATAGACC TTTTCAGATA CTCTTTATCC	180
AGTGAGAGAT GACCTATTTT TATTAAACT TGGGTTTGGT ATCTTGAAT TGGCTTGAAA	240
ATGATTTGTT TTTACATTGG ATGTGAACGG AAAGTTTGTA TCTCAAATGT TTTACCACCT	300
GAAGGACAG CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:85:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GTGGACATGG AAGTAGGTGA GGTGGGGGA CCTATGAAGA AAAAAAGAGC CTTTCCACTG	60
GGCAGTGAAG TGTGTACACA CACACTGGG GCAGAGCAGT GTGAAAACAT TCTGCACCAG	120
CACACAAATG ACTTTTGGCA AATCATCTNC CTGATCTGTC GGATGTTACG TCTCTGCAGA	180

ATCTGGAGAA	AACCAGAAAA	CCCAGCTTGT	TTGCCCTCAT	TTTGGCAGTT	TAATTTAGGA	240
ATCACACTGG	CTTTACATAA	ACTCTTTACC	AAAAAACTG	TATTCTGTAT	TTTGAAGGCA	300
CAAGTTAACA	TGGGCCCAAG	GGAAGGAAGC	ATTGTATACA	ATTACATAAT	AGCTACTCTA	360
TTACTTTAAA	ACCTAATGGC	AGCCTCGGGC	AGAAAAGTCA	AAAGGGGAGA	GAAACCATT	420
CTGTGAAATT	ATCTGATGCA	ATCATCTCTT	TGGAGACATT	GTCAGTTGAC	AATGGTTCTG	480
CTTTTCTCT	CGAG					494

(2) INFORMATION FOR SEQ ID NO:86:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

GAATTCGGCC	AAAGAGGCCT	ACGGGAGCAG	TTCATGCAGC	ACCTCTACCC	ACAGAGAAAA	60
CCTCTTGTGT	TGGAAGGGAT	TGATTTGGGG	CCATGTACAA	GCAAATGGAC	AGTGGATTAC	120
CTAAGCCCAAG	TTGGAGGGAA	GAAAGAAGTA	AAGATTCATG	TTGCTGCAGT	TGCACAGATG	180
GACTTCATTA	AACTTTACCT	TTTGACCACT	TGGTCCAGAG	GGCAGCTGAA	GAGAAACATA	240
AAGAATTCTT	TGTTTCAGAG	GATGAGAAAT	ACTACTTACG	GTCAGTTGGA	GAAGACCCTA	300
GAAAGGATCT	TGCAGATATC	AGAAAGCAGT	TTCTTTTGTT	GAAAGGAGAT	ATTAAGTTTC	360
CAGAATTCTT	CAAAGAGGAA	CAGTTCCTTT	CCAGTGTGTT	TCGAATTAGT	TCACCAGGAT	420
TACAACTATG	GACTCATTAT	GATGTAATGG	ATAATTTGTT	AATACAAGTG	ACAGGAAAAA	480
AGCGTGTGTT	ACTCTTCAGT	CCTCGAG				507

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

GAATTCGGCC	AAAGAGGCCT	AGCTTATCCA	GTCTAGTAAT	TTTTTTTGTA	TGTGTGCACA	60
GCACAAATAG	TTACAATAGT	TCCCTTTTTT	GACATCAAAT	TCAACAATAC	CTGGCATATA	120
ATTGCTAAAT	ACTGTCATCA	TTTTTATTAT	CATTATCCCC	CACATAGTCA	TAAATAAGCA	180
CACATGCTAA	TCTTCAACTC	TTCTTCTATT	ATTGCTGCC	TTCTTACCTG	CGTTAGTGAG	240
AAAGTGCCTT	CAAATAGATT	GCCAACAGTT	ATATGGCTCG	AG		282

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

```

GAATTCGGCC AAAGAGGCCT AGTGCAGTAT TCACGTGTAA CTTTAAAGTT TTCAGTACAG      60
TGCTTTTATA CCTTTAATGC AATGTTGTAT TCATTGGGT ACTATTGTGT AGTATTTAGG      120
ATGTATGCAT GTTTGTTTAT ATGTAAGCTT GGTGGGTGCT TTCGCTTTTG TGCTACCTTT      180
CTTGGATTTT TGTACCAGAG ATGTGCTAAA CTGATGAAAT ACATTGAGAA AGTTTCCATC      240
TTATTCTTTT ATATGGGACT GATGATGTGT GTTGGGGTAG ACTGCTCCTG CAGAGTTTGG      300
AAGAAGTCAC CAGCAAAGCC GGCCAATCTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

```

GAATTCGGCC AAAGAGGCCT AGGTTTCTAG ACTGGAAGAA CAAATGAATG GCTTAAAAAC      60
ATCAAATGAA CATCTTCAA AGCATGTGGA GGATCTGTTG ACCAAATTAA AAGAGGCCAA      120
GGAACAACAG GCCAGTATGG AAGAGAAATT CCACAATGAA TTAAATGCCC ACATAAAACT      180
TTCTAATTTG TACAAGAGTG CCGCTGATGA CTCAGAAGCA AAGAGCAATG AACTAACCCG      240
GGCAGTAGAG GAACTACACA AACTTTTGAA GGAAGACAAG GAACGCNAGA AAAAAGACGA      300
AGAAAAGGTG AAGGCAGAGG AAGAATCAAA GAAAAAAGAA GAGGAAGAAA AAAAGAAACA      360
TCAAGAGGAA GAGAGAAAGA AGCAACTCGA G                                     391

```

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

```

GAATTCGGCC AAAGAGGCCT AGCTTCTCTG CTTTATTTAT TCATTATTTT TTAATTTTTT      60
GAGATGAAGT CTCGCTCTGT CATCCAGGCT GGAGTGTGGT AGCGCCATCT CAGCTCACTG      120
CAACTTCCAC CTCCAGGTT CAAGTGCAAT GTCTTTTAA TGTCTATGTG AAGGATTCTG      180
AGCTGTACGA GTTCTGCCCC AAATCTGCAC TTGGGCCTCA GGATCAGGCC GCCTCCCCAT      240
CAATCTGGTG GATGCCAGTT ATAACCTTTG CCCTGCACCC CATCCACACT GTAGTTCAGA      300
GAAAATCAAC AGTCAGCAAT CATATCACA GCACTCGAG                                     339

```

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

```

GAATTCGGCC AAAGAGGCCT ACGAGTCAGC ATCTAGACTC AGCTCCTTCT TCCGCGCTGC      60

```


CCTCACACAT GCGTGCATTG ACTCTCCTGT CCAGGCTCAT GTCCTTGTGC CCGCTTGCTG 120
CTTTGCCCTCC TTGCTTGTTT CTGACTTGCT CACCCACTCT CTGTCATTGT CTTGCTTACT 180
CAGGCTCACC CTATCAACTC GAG 203

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

GAATTCGGCC AAAGAGGCCT AGTTGAATTA TTGCCACATG TTAGGAATGT GGAAGGTTGC 60
TTGGATAAAT GAGAAAAGAA AGAAAAGAAT GCAAGTAATG TCCTGCTGGG GTAGTGCACT 120
CCTCGAG 127

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 179 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

GAATTCGGCC AAAGAGGCCT AGATCCCACG AATTTAGGCT CAGAAGCATC GTCCTCTCC 60
AGCCCTGCAG CTATTCACCA ATATCAGTCC TCGCGGCTCT CCAGGGCTCC CTGCCCTGAC 120
CTCTTCCCTG GGTTTTCTGC CCCAGCCTCC TCCTTCCCCC CCCCCCTATA TCCCTCGAG 179

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

GAATTCGGCC AAAGAGGCCT ACTGGAATCA CTAACTTTG TCTCATTTT TTTCTCTTCC 60
ATCAAATATC AATTTTGGAT TCAGATCCAG TTTTCTTCTT TCAATTATTT CTGCCCTTTA 120
AAATAATACT ACCTCCTTCC TCCCACAATT CATTTCAGCT TGTTTTAGTT CCTTGGGTTT 180
TATATTTTTT CTCCTAGTA TTACAATATA TGCACAAATA TTAGGTTATA AAACCTCCAA 240
TACAACTTTT ACTGCCACTC ACAGGTTTTT CAATTGTTTT CATTTTCATG TACATTTAAA 300
TAATGTATAT ATTAGGGATA CTCGAG 326

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

GAATTCGGCC	AAAGAGGCCT	AAATATGAAA	AGCTGTCTAT	ATCTACCCAG	CCAAACCATC	60
TCCAGCTTTT	ACTTTTATTG	AGCAAGTATA	CGTTATTTAT	TTAGTCATCC	ATTCATTTCAT	120
TTACTCATTT	ATTTATTTT	TTTCAGCTT	ATTTCTGCTT	TCATCTTAAT	TCCTCTCTTA	180
AACTTTGTG	TATCACATTG	GTTCTCCCTG	ACCTCCACCA	CTGTAACCTG	ACTTAAGTTA	240
AATGTTAAT	TTATTTT	TTTTTTTTT	TTTTTTTTT	TTTTTTTTT	TTTTTTTTT	300
TTTAGGTAGA	GAAGATGTCT	CACCATGCTG	CCCACTCGAG			340

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 240 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

GAATTCGGCC	AAAGAGGCCT	ACTTCTTCC	TTATTCTACT	TCTCTTTTT	TCTTTGTTC	60
AACATCATGT	TTGTGAAAGT	TTTCATGCATA	TCGTTGCAAG	TATTTGTATT	TCATTCATTT	120
CTATTGTTGT	ATAATGTTAC	ATTGCATGAA	TATGCAGCAA	TTTGTCTAC	TGTAAGAAAGC	180
AATAAGGATT	TAGTTATTT	CAGGTGGAC	ACAAATAATT	TTGCTATGAA	GGGTCTCGAG	240

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

GAATTCGGCC	AAAGAGGCCT	ATAACTATAT	AGCCTAGAAT	TTTTCTATT	CTGTTATTAA	60
GCCTCTATCA	CTATTCTTTG	ATTCTAGGTT	TTATAATCCA	TTCTTTTTTA	TAACAACCTG	120
TTCTTGTTT	ACTTTTCCCT	ATTTTGTGTT	TATACCCATC	TATTCTTTTT	TAGGATCTAT	180
TCTCCACTTT	TAACTTTGAG	GATTCTAAAA	TACTTACTTT	AAAGTTATTT	TTAACTTGTT	240
CTATTTTGT	TTTTGTCAGG	AGCGAATTG	CCTTTTTTAT	TTGGCTGTT	TACCATGCTT	300
TTTGGAATTT	TGTTTGTAG	GCTTCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

```

GAATTCGGCC TTCATGGCCT ACTCTACTCC AAGTAGGAAA AGGCCAGGAG GTCCTGTAA      60
AGGATGCACT CAGAGCCCGG GTCCTTAAC GTATGAGAGT GCTAACCAGC AGGTGTAGAC      120
TTTTCAGGAG TGAAGAATGA GGCAGGCAT CCAAACCTGG ACCTTCATCA CCTTTGTTT      180
CATCTCAAGA CAATTCTGAG GGAAGTTT GAGCGTGTG TGGAAGGTGA ACCTGAAGA      240
AGAGTGTGGG CTTTGATGTG ACTCAGTTGA ATACTCGAG      279

```

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

```

GAATTCTCAT GAAACTCTCA GCGGAAAGCT ACAAGGAAAC ACAGATGGTG AAGATTAAAG      60
AGGAACCCAT GGAGGTGAC ATCCAGGACT CCCATGTCTC GATATCACCC AGCCGGAATG      120
TTGGCTACAG CACTTTAATC GGGCGAGAGA AAACCGAACC CTTACAGAAG ATGCCAGAGG      180
GCAGAGTACC CCCAGAGAGA AACCTCTTCA GTCAGGATAT CTCTGTGAAA ATGGCTTCCG      240
AGCTCCTCTT TCAACTGTCA GAAAAAGTGA GCAAAGAGCA CAATCATACA AAAGAAAACA      300
CCATCCGGAC CAATCTCGAG      320

```

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

```

GAATTCGGCC TTCATGGCCT AGAGCAACAT AGTGAGACCT CATCTCTACA AAAAATAAAG      60
AGAAAATTAG TTGGGGGTGG TGGCGTGCAC CTATAGTCCC AGCTACTCAG GAGGTTGAGG      120
TGGGAGGATC ACTTGAGCCC AGGAGTTTGA GGCTGCAGTG AGCTGTGGTC ATGCCACTGC      180
ACTCTAGCCT GAGTGACAGA GCAAGATCCT GTCTCAAAAA ATAAAGTAAA ATAAAAAAT      240
CAGTCAACAA CAGTGATTTG TCTTCAAGCT GCCCTCCTCT TCGGCTCTCA AGGCAGTTTG      300
TGAAGTGTCT AGGATAGGAA TTTCCAGAA GGGCTTGCTC GAG      343

```

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

GGAAGATGTG	CCAAAGTTCA	GAAAACATAA	TCTTATCTGA	TCAGATTAAA	GATCACAACT	60
CCAGTGAAGC	CAGATTTTCT	TCAAAGAATA	TTAAGGATT	GCGATTAGCA	TCAGATAATG	120
TAAGCATTGA	TCAGTTTTTG	AGAAAAAGAC	ATGAACCTGA	ATCTGTTAGT	TCTGATGTTA	180
GCGAGCAAGG	CAGTATTCAT	TTGGAACCTC	TGACTCCATC	CGAGGTACTT	GAGTATGAAG	240
CCACAGAGAT	TCTTCAGAAA	GGTAGTGGTG	ATCCTTCAGC	CAAGACTGAT	GAAGTAGTGT	300
CTGATCAAAC	AGATGACATT	CCTGGAGGAA	ATAACCCNA	CACTCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

GAATTCGGCC	TTCATGGCCT	ACTCGCGGTC	TGTTAGTAGT	ATAGTGATGC	CAGCAGCTAG	60
GACTGGGAGA	GATAGGAGAA	GTAGGACTGC	TGTGATTAGG	ACGGATCAGA	CGAAGAGGGG	120
CGTTTGATAT	TGGGTTATGG	CAGGGGGTTT	TATATTGATA	ATTGTTGTGA	TGAAATTGAT	180
GGCCCTAAG	ATAGAGGAGA	CACCTGCTAG	GTGTAAGGAG	AAGATGGTTA	GGTCTACGGA	240
GGCTCCAGGG	TGGGATGAGC	GGGCCAAGAT	CGATGATCCC	ACAGACTCCA	AGCCTGAGGA	300
CTGGGACAAG	CCCGAGCATA	TCCCTGACCC	TGATGCTAAG	AAGCCCGAGG	ACTGGGATGA	360
AGAGATGGAC	GGAGAGTGGG	AACCCCAAGT	GATTCAGAAC	CCTGAGTACA	AGGGTGAGTG	420
GAAGCCCCCG	CAGCGTCTCG	AG				442

(2) INFORMATION FOR SEQ ID NO:103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

GAATTCGGCC	TTCATGGCCT	ACAGAAAGTA	AGTTGGAACC	ATGTAAGAAA	AAAAGACACA	60
AATAAACTA	GGAAAGTGGC	ATGGAGCTAG	GCGTGAAGTT	GCTGCTCAGT	TTACATGTAT	120
GAAGTTCTGT	GTGGACTTAA	GCTCCTACTT	CAGTCATTTA	TTGTATGACT	TGGACAAGTT	180
GCCAAACATC	TCTAATATTC	ATTCATATTT	GTAGGGTAAA	AGGATGAGTA	ATATGTATCT	240
TTAGTGATATA	AAACATTTAC	AGACAACTCG	AG			272

(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

```

GAATTCGGCC TTCATGGCCT AAGACACCAG CGAGCCCAGG CAGGTAATGG AAGCAACTGT      60
AGCTGACTGG ACCTAAGAAG CAGTGGCACG GGTGCCAGGC ACCCCAGCTG ACCTGCCTTG      120
GTGCTCAGAG CAGCAGGGCT GGCCATGGTC AGGGAGTCTG GGGAGGTCAT GCTCTGTCCA      180
CAGGGTTCTA GCCAGCTTCT GCCAAATTGT CTGTTTTTTC TCAAGAGAAG CTGGGAAGGC      240
CAGTTGTGGT GTCTCATACC TGCAATCATA GCACTATGGG AGGACTCGAG      290

```

(2) INFORMATION FOR SEQ ID NO:105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

```

GAATTCGGCC TTCATGGCCT ATGAAAATTT GGAAGAAGAA TCCAATGAAA GTGGTAGCCC      60
TTTTGACCCT GTTTTTGAAG TTGAACCTAA TCTCTAACGA TAACCCAGAG GAACATGTAC      120
TGAAGGTAAT TCCTGAGGAT GCTTCAGAAT CTGAGGAGAA GCTAGACCAA AAAGAGGATG      180
GTTCAAATA CGAAACTATT CATTGACTG AGGAACCAAC CAACTAATG CACAATGCAT      240
CTGATAGTGA GGTGACCAA GACGATGTTG TTGAGTGAA AGACGGTGCT TCTCCATCTG      300
AGAGTGGGCC TGGATCCCAA CTCGAG      326

```

(2) INFORMATION FOR SEQ ID NO:106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

```

GAATTCGGCC TTCATGGCCT ATGGCAATGG TGGTCGTGGT GCTGGGTGGG ATGNGGTCTT      60
CATCCTCTTC CTCCAGGAAG GATGCCTCTG GGATATGGCT GAAGGCCTCT GGGTGCAGCC      120
TGGCCAGTTT CCCTTTCAGC GTCCTGATAC GCGGGAAGAT GATGTCCAGG TCCCGTTTCA      180
TCTCTACTAG GGTCTCTGTG TGGTGCAGGA AGCGTTCGCT CATCTGCTGC AGGCGGGCAT      240
TGGACAGGTT GTTGAAGTTG AGCAGCATCT CATGCTCTT CTCAAAGCGG TCCAGCATGT      300
TCTTCTGGGA CAGGATGATG GCGTTGACAT CATCTGTGTT CACCATGCTC AGGATGCGGC      360
CGCAGAAGAC CCTCGAG      377

```

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 601 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

```

GAATTCGGCC TTCATGGCCT ACATGACACC ACCTGAACGT CTCTTCCTCC CAAGGGTGTG      60
TGGCACCACC CTACACCTCC TCCTTCTGGG GCTGCTGCTG GTTCTGCTGC CTGGGCCCCA      120

```

```

GGGGCTCCCT GGTGTTGGCC TCACACCTTC AGCTGCCCAG ACTGCCCCGC AGCACCCCAA 180
GATGCATCTT GCCCAGCA ACCTCAAACC TGCTGCTCAC CTCATTGGAG ACCCCAGCAA 240
GCAGAACTCA CTGCTCTGGA GAGCAAACAC GGACCGTGGC TTCCTCCAGG ATGGTTTCTC 300
CTTGAGCAAC AATTCTCTCC TGGTCCCCAC CAGTGGCATC TACTTCGTCT ACTCCCAGGT 360
GGTCTTCTCT GGGAAAGCCT ACTCTCCCAA GGCCACCTCC TCCCCACTCT ACCTGGCCCA 420
TGAGGTCCAG CTCTTCTCCT CCCAGTACCC CTTCCATGTG CCTCTCCTCA GCTCCCAGAA 480
GATGGTGTAT CCAGGGCTGC AGGAACCTCG GCTGCACTCG ATGTACCACG GGGCTGCGTT 540
CCAGCTCACC CAGGGAGACC AGCTATCCAC CCACACAGAT GGCATCCCCC ACGCACTCGA 600
G 601

```

(2) INFORMATION FOR SEQ ID NO:108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

```

GAATTCGGCC TTCATGGCCT ATTTTATTTT TTTTATCAA AAGTTGTTT TATTTTCAAT 60
ACAAATAAAA TACCATGCTT GTTACTAGTG CAGTTCTCGA G 101

```

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```

GAATTCGGCC TTCATGGCCT ACAGAATTGG AGGCATGATG AAGACTCTGC TGCTGTTTGT 60
GGGGCTGCTG CTGACCTGGG AGAGTGGGCA GGTCTGGGG GACCAGACGG TCTCAGACAA 120
TGAGCTCCAG GAAATGTCCA ATCAGGGAAG TAAGTACGTC AATAAGGAAA TTCAAAATGC 180
TGTCACCGGG GTGAAACAGA TAAAGACTCT CATAGAAAAA ACAAACGAAG AGCGCAAGAC 240
ACTGCTCAGC AACCTAGAAG AAGCCAAGAA GAAGAAAGAG GATGCCCTAA ATGAGACCAG 300
GGAATCAGAG ACAAAGCTGA AGGAGCTCCC AGGAGTGTGC AATGAGACCA TGATGGCCCT 360
CTGGGAAGAG TGTAAGCCCT GCCTGAAACA GACCTGCATG AAGTTCTACG CACGCGTCTG 420
CAGAAGTGGC TCAGGCCTGG TTGGCCGCCA GCTTGAGGAG TTCCTGAACC AGAGCTCGCC 480
CTTCTACTTC TGGATGAATG GTGACACTCG AG 512

```

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

```

GAATTCGGCC TTCATGGCCT AAATTATTAA AGGTGACAGT ACACAGGAAA CATTACAATT      60
GAACAATGCC TCAGCTATAC ATTTACATCA GATTATTGGG TGCCTATTTG TTCATCATTT      120
CTCGTGTTCAGGACAGAAT CTGGATAGTA TGCTTCATGG CACTGGGATG AAATCAGACT      180
CCGACCAGAA AAAGTCAGAA AATGGAGTAA CCTTAGCACC AGAGGATACC TTGCCTTTTT      240
TAAAGTGCTA TTGCTCAGGG CACTGTCCAG ATGATGCTAT TAATAACACA TGCATACTA      300
ATGGACATTG CTTTGCCATC ATAGAAGAAG ATGACCAGGG AGAAACCACA TTAGCTTCAG      360
GGTGTATGAA ATATGAAGGA TCTGATTTTC AGTGCAAAGA TTCTCCAAAA GCCCAGCTAC      420
GCCGGACAAT AGAATGTTGT CGGACCAATT TATGTAACCA GTATTTGCAA CCCACACCGC      480
TCGAG                                     485

```

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

```

GAATTCGGCC TTCATGGCCT ACACACATTG TGAGCTGTAT ACGTTAACCC AAAGTCTGCA      60
TTCAAAGTGG AATTATAACT GGGCAGTGAA TGAGTTGCTC AGTCCATCTA TTAACCATAC      120
TCTTTTAGGC TTTTATTGCG CTCTAATTGT TGTAATAATT AACATTTTCC CAGGAAGTTG      180
TTTACAGAA GAAGGGGCCT TAGCGGCTTT CAACTCTTTA GAGATAAGTT CAACTTTGTG      240
GATTGACCAC AGCACATCTT GTTTAGTAGT GAGCGGGAGC CATATGAATC CTCTAGAGAC      300
ACAGCCGTGT CTGAGATGGA CATTGCCAAC ACAGCTCGAG                                     340

```

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

```

TTCGGNCTTC ATGGCCTACT CTCATAAAAA TATTCAAAGA TCAACCCCAA ACGTGCCTGC      60
ANTTTGGACA ATGTNAGCTA AAGCTATAAA TGGAACAGCA GTGGTCATGG ATGATAAAGA      120
TCAATTATTT CACCCAATTC CAGAGTCTGA TGTGAATGCT ACACAGGGAG AAAATCAGCC      180
AGATCTAGAG GATCTGAAGA TCAAAATAAT GCTGGGAATC TCGTTGANGA CCTCCTCCT      240
CTTTGTGGTC CNTCTTGGCA TTCTGTAGTG CTACACTGTA CAAACTGAGG CATCTGAGTT      300
ATAAAAGTTG TGAGAGTCAG TACTCTGTCA ACCCAGAGCT GGCCACGATG TCTTACTTTC      360
ATCCATCAGA AGGTGTTTCA GATACATCCT TTTCCAAGAG TGCAGAGAGC AGCACATTTT      420
TGGGTACCAC TTCTTCAGAT ATGAGAAGAT CAGGCACAAG AACATCAGAA TCTAAGATAA      480
TGACGGATAT CATTTCCATA GGCTCAGATA ATGAGATGCA TGAAACACTC GAG                                     533

```

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

GAATTCGGCC	AAAGAGGCCT	AGAAAATAGA	AAATCAGGTA	GCTATGTCAT	TTTATAAGCA	60
TCAGTCCTCA	CCAGATTTGT	CAAGTGAAGA	AAGTGAAACA	GAAAAGGAAA	TTAAAAGGAA	120
AGCTGAAGTT	AAGAAAACCA	AAGCAGGAAA	CACCAAAGAA	GCAGTGGTTC	ACCTGAGAAA	180
GAGCACAAGA	AACACAAGTA	ATATTCCAGT	GATTTTGGAA	CCTGAAACTG	AAGAAAGTGA	240
AACAGAAAAG	GAAATTAAAA	GGAAAGCTGA	AGTTAAGAAA	ACCAAAGCAG	GAAACACCAA	300
AGAAGCAGTG	GTTACCTGA	GAAAGAGCAC	AAGAAACACC	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

GAATTCGGCC	AAAGAGGCCT	AGGCAGGTAT	TCTTTGCTTT	GGGAAATTCT	TCTTTCTGTC	60
CTCCCTTCCC	TCACTTTTTC	CAAATTCTGG	GCACAACAGC	AGCTCTCTCT	CTTCTGTGGC	120
AGGTGTGCAT	CCTATTGGCT	GGCTGGTATT	TCTTGTTTTT	TTTCCCCCTT	ATTCTTTTTTA	180
AATGGGGGTG	GGGGTATAAA	AATATGTGTA	TGGGGTACAT	GCAATAATGT	TGTAATGTTT	240
CTTGTTGTTT	AATGGATAAT	TAATTGCAAA	ATAATTGTTT	TAATTATAAC	ATGTTTGAGT	300
AAATGCTAAA	TTAGTATTTT	TTTCTAATAT	AATAATGAAT	TTGAAATCTA	GCATTCCTGT	360
AACAATGTGT	CTATGTTTGT	CTGTCTGTGT	CTGTCTAATA	GTAATTAATA	TCTGTGGTCC	420
GCACCCACTC	GAG					433

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

GAATTCGGCC	AAAGAGGCCT	AAGCAAAGCT	TAGCTTACGG	GGAAAAAAA	AAAAAAA	60
AAGTAGAGCT	TNCCTTGAAT	CTGGAGAAAT	TAAGCACACA	GGTGCCTGC	AATATTAGTT	120
AAGAGACTAC	TGCACCCATC	ATACTGTAGC	TTAAGACAGT	TTCTTCTTTT	AGTTTTTTCT	180
AAAATGTCTC	CATGTCTGTG	TTATGCCACA	AATAACACAG	CCTTGTTTAA	CTTTTGACT	240
AAAAAAAATC	AACTTATTGG	CCAAGCATGG	TGGCTTACAC	CTATGATTGT	AGCACTTGG	300
ATAGGTCTCG	AG					312

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

```

GAATTCGGCC AAAGAGGCCT AATTTCCTA ACTGTGTGCT GCCTTTTGGG TTAATTAGAA      60
TTGTAGCATT TCGTTTTGAT TATTTTTTTG GCTCTTTAGC TGTTCTCTCA CATTTTTTAA      120
AATGGTAACT CTAGGGATTA TAATATGCAT CTTTAATTTA TCAAAGTCTG TTTTACTAC      180
TTCGTGTAAA ATAAACGAAC CTTGCATTTA TAGTTACATT TATTCCTCTC ATCTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

```

GAATTCGGCC AAAGAGGCCT ACTCAAAAGT AGATGAGCAA TTGGTCAGAA TTGTTAGAGG      60
ATATTATTTG AGCTAAATGT TTCCTCTCTC TGTTTCAGTG GTGTATGTGC AAGTGTGTGT      120
ATATGTTTTT TGTGGGGAC AGTTTCAGGT AGATGGTATG AAGAGGCAGC AGGAGACTCT      180
CGAG                                             184

```

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

```

GAATTCCGCC TTCATGGCCT AATTTTCTAA AACCTGGAGA CAAACCACAT AAATACAAAA      60
CAAGTCTGCT TCTTCAAAT TCTGCTGGTG AGAACTCAGA TATCAGTGAT CTTATTAGCT      120
TTTTACAAG CCAGAACATA ATGGTGACGA TGATTAATGA CAGTGACTAT GTATCCGTGG      180
CTCCCCATAG TGCGGCTTTA AATGTGATGC ATTCAGAAAA GGAATATGTT TTTGCAGCTG      240
TTTTCAACAG TACTATGGTT TATTCTTTAC CTATATTAGT GAATATCATT AGTAAGTACT      300
ATCTTTATCA TTTAAATGTG ACTGAAACCA TCCAGCTCGA G                               341

```

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

```

GAATTATGCT GTGCTGTTTT CCTGGACACT CAGAATCAAA CAGGCCTTCC ACCCCATCCC      60
ATCATGTTGA ATTACAAAGT ATTTTGAGCA TCGTTTGGTT TGTTTCTTTC CACCCATACC      120
TGTGTAGGGC AGCGGTAGCA GTCTTCAACA ATGCATCCTC TTGGACAATG CATTGTAATA      180

```

TCTCTCTTTC AAATTCTGTT TCACATAGTC ATTTCTCATG TTCTGTTGGA GACCCCCAAA 240
AAATTCATTC CACACTGTCA TCCCTTTGTC CTAACCAGAA TCTCGAG 287

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

GAATTCGGCC TTCATGGCCT AATGTATGGT AGACAATTTT TTTTAAAGAC ACAGAGATAA 60
ACGTTTTCCT GCTTTGGTTA CCTTCCTTTT CCCCTTTAAA AGGAATTAGC TATAGAAGCTG 120
CTTTGTAAAG ATGCTTCTTG ATATTTTACT TTTGTTCTT TTCCCTAATC ATTCCCTTTT 180
CACCCCACTC CTCGAG 196

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

GAATTCGGCC TTCATGGCCT AGTGATTGGG TGCAGAGGAA ACAGGAACCA GAGAAGGGTC 60
ATCTCAGCTG CCTGTCCCAC TCCCTATGCT TGGTGTTACC TGCGCCATAG TCTCGAG 117

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

GAATTCGGCC TTCATGGCCT AGTAAGTGCT CTGAGTATAT TAGGAAAAGG AAATCTTATA 60
CATAAAAATC AAAGCTGTTG CTAATTTTTC CACTAGTGAG TCAGTCTATT AACATTACTC 120
ATGGTAGGTT TTGCCATACA GAATTTTAAT TTTTATATAT TATTTTGGC TTTGTTATTA 180
TGCTTAGAAG TCCATGGGGA CCCAAAGATC AGAAAAGATT CATCTGTACT CGAG 234

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

GAATTCGGCC	TTCATGGCCT	ACGGAACGAA	CATTGGCTCG	GCGGTGGTGA	TGCTAATTCC	60
CACTGTCATG	TTCACAGTGA	TGGCCGTCTT	TTCCTTCATC	GCCCTCAGCA	TGGTTCATAA	120
ATTTTACCGG	GGAAGTGGGG	GGAGTTTCAG	CAAAGCTCAG	GAGGAGTGGG	CCACAGGGGC	180
CTGGAAGAAT	CCACATGTGC	AGCAGGCAGC	CCAGAACGCA	GCCATGGGGG	CAGCCCAGGG	240
TGCCATGAAT	CAGCCAAGAC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTTGCCA	CACCATGAAG	CTCTTGTCGC	AGGTAAGTGT	GCACCACCAC	ACCTGGAATG	60
CCATCCTGCT	CCCGTTCGTC	TACCTCACGG	CGCAAGTGTG	GATTCTGTGT	GCAGCCATCG	120
CTGCTGCCGC	CTCAGCCGGG	CCCCAGAACT	GCCCTCCGT	CTGCTCGTGC	AGTAACCACT	180
TCAGCAAGGT	GGTGTGCACG	CGCCGGGGCC	TCTCCGAGGT	CCCGCAGGGT	ATTCCCTCGA	240
ACACCCGGTT	CCTCGAG					257

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC	TTCATGGCCT	AGGAAAGATT	CGTGTTTTAC	TTTAATAAAC	CTGAAAGAAC	60
TGTCGTTTTT	CACTGCCTAT	AGGACCACTA	CAAAGCCGCA	AAGAAAAATT	AGACTTGTTT	120
CATTTTATAA	CAACAACAAC	TGCTACTACT	GCTACTAGTT	AGATACCGTT	TGCTCATTTA	180
TAACAATCTC	AGTTGGTAGG	ATGAAGCTTA	AACACTTGGC	ATTCATCGTC	TTTTTCAGTC	240
CTCTCGAG						248

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

```

GAATTCGGCC TTCATGGCCT ACTGTCTTTT CATGCAGATT TCATATTGTC TTTGTCCTTT      60
TCATTGCTTC TTGACCTTCC TGGCAGGTGT CGCTCAGTTT CTTCTGTGTT CCCTTCCTGT      120
CCTCTCCACA CCTGCTATCC CCGCCACTC CCATCTACCT CCCGGGAAGC CAGCCCTGCA      180
TGCTGAGTTT GTGACCTGCT TCATTCCCAT TTCATTTCTA GAGGGTTTAG AGGTGACCTG      240
GAACCGTTCC CTTTCCCTCT CCTACCCCTT CCTCTGCAAC ACCAAGAGGC CTGGAGGGGC      300
AGACAGAAAG CAGCCAGCCA CGGCGGGAAG TCTCGAG                                337

```

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

```

GAATTCGGCC TTCATGGCCT AACTTATTTT TTTTGTGAT TGCCTGTCTT TCTTTTCTT      60
TCCTTCCCTC CCTCCCTCCT TCCTTCCTT CTTCTCTCT GTAGAGATGA GGTTTCACCA      120
TGTGGCCAGG TTGGTCCTGA GCTTAAGTGG TCCTCGCACC TCAGCCTGGC AAAGTGTCTG      180
GATTACAGGT GTGGGCCATC ACGCCTGGCC TTACAGTAAA TTCTTGATAA ACAACCCAGC      240
AACACACCTC GAG                                253

```

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

```

GAATTCGGCC TTCATGGCCT AGGACGGGGG ACTCAGGTTT TACACTGGAA CCTGGGGTCA      60
TGTATCATGT ACCAGGTGGG GAGAAGTGTA GCAAATCTCA GTGCCAATTT GAGGGGAAGC      120
CAGTCATTCC AGGAGAAGAG CTGAGGGGAA AGAGCTGTTG ACTTTCATAA TGCAGTCTTA      180
ATTATCCAGT CACCCTCCTG CCACATGGCA GAAGCCAGGT GGCAGTGATG GTGGTGGGGG      240
AAACAAAACA CACAGTCTCT GGCAAGCCCC ACCGGGAAAG GAGGGCTCAG AAGGCGTAGC      300
GGGTCCGGAT ATCCTCGAG                                319

```

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

```

GAATTCGGCC TTCATGGCCT ACAATAAAAG CCCATAGGGA AGAGAGAGAG GATATAGGGA      60
AACAGAATCA GATGTGTAAT ATACTTGGCA CAGCGAAAAA ATGGATTAA AAGACAAAAA      120
TGGAGGTCCA GGTAGATGTA ATTCACACAG ACTGAAAGTG AGTTCGGGCT TGTGTA AAAAC      180

```

ACATGAGATT GGATTGACC CCTGGGCTCT CAAGTGTCCT CTTAGATCTA GAACTGCTCC	240
TTGGTGGCCA TTAGATCGAG TCAGTTTGA TCTGCATCAC TTAGTTATTG GGAATTTCTT	300
TGTTGGAAAC AGGAAAATTT TTTAGATTA TTTGGCGTAC GGCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

GAATTCGGCC TTCATGGCCT AGGCACAGTG AAACCCGTGG AAATTCAAAG GTGAGCAGGA	60
CAGTGGGTCC TGTATCTTGA TCTTACGGA TCTTTCTCTT CTGAATCCT CACAGCACCC	120
ATTTTATAGA CAGGAAGACT GAGGCCCGAA AGTTCTGTCT GACTCTGAGC CTGGCCTCTT	180
TGCTGCCTCC CGTTGTCTG TGAGGCTGTG TGGTCACAGC ACCCAGGACT TGAGAGGAGT	240
GAAGTTCTTC CTCACCCCGC AAAGGCTTCA TGAGCCCTAC TGTGTGCCAG GCCAGCCCTG	300
CTCAGTCTGG GCGGATAAAC ACAGGGCAGA TTCTGAAAGC CTGTGTGAGG GAAGTTCTAG	360
GCCTGCAGGA GCTGAGAGGA GACCCTGGAG AGGAAGGGAG TCAGGGCCAG CTTCTCGAG	420

(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

GAATTCGGCC TTCATGCCTA AGCTGATGGA GACTGTAAAT GAACCAGAAA CAGGTGAAGT	60
GAGCAAAGAT GCAGTCATTG TAAAGCAGGA GAAAAATAAT GAATATTGCC TTCAGGATAT	120
TGATGATAAA TTGTCAGAAAT CAGCAGAGGA TGATGGTGAA GATGATACCA ATGATGAAGA	180
TGATGATGAA GATAGTAACC CTAAAAAGAA TACTCAGGCC CCACTAGAGT TAATGGCAGA	240
ATTTCTGAGA GCAGAAATGG CCCGAGAGTA CCAGCTGGCA AAAAAATTAT GTCAGATGAT	300
CCTAATCTAT GAACCAGAAA ATCCTGAGGC CAAGGAGTTT TTCACACTTA TTGAAGAAAT	360
GTTGCTGATG GAGAAAATC AGAATCATGA GCAAGACGGT GAAAACAGTG ATGAAGACAG	420
CAGCGGGCTC GAG	433

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

GAATTCGGCC TTCATGGTCT ACAAATCAA CTGCAAGCAG CCATCATCAG TTTGGAAGAA	60
GCTTTGGGAA GCCTTCAAAG AAAACCTCG GTATCCACCA AGTCAGGCTC AAGCAGCTCT	120

TCAAGACAGT	CCCCCTGAAG	AGTACTCCTA	TAAGAAATCA	ATAAGAAACC	TGTTTAAAAA	180
CATTCCTTTT	GTCTTCTGT	TGATCACTTA	TGGTATCATG	ACTGGTGCCT	TTTATTCAGT	240
CTCAACGTTA	TTAAATCAAA	TGATATTGAC	ACAACTCGAG			280

(2) INFORMATION FOR SEQ ID NO:133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

GAATTCGGCC	TTCATGGCCT	ACGCGAGCGG	CAGGTGTGCA	CAGGAGGTTT	TCCACTTTGT	60
NCTCTGAAGT	CGCGGTCAGG	ATGGTTTTCT	CTGTCAAGCA	GTGTGGCCAT	GTTGGCAGAA	120
CTGAAGAAGT	TTACTGACG	TTCAAGATAT	TCCTTGTCAT	CATTTGTCTT	CATGTCGTTT	180
TGGTAACATC	CCTGGAAGAA	GATACTGATA	ATTCCAGTTT	GTCAACACCA	CCTGCTAAAT	240
TATCTGTTGT	CAGTTTTGCC	CCCTCCTCCA	ATGGTACTCC	AGAGGTTGAA	ACAACAAGCC	300
TCAATGATGT	TACTTTAAGC	TTACTCCCTT	CAAACGAAAC	AGAAAAAAT	AAAATCACTA	360
TAGTAAAAAC	CTTCAATGCA	TCAGGCGTCA	ATCTCGAG			398

(2) INFORMATION FOR SEQ ID NO:134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

GAATTCGGCC	TTCATGGCCT	AGGGCGATGG	TGGGCAGAGG	ATCCTTAGTG	CTCAGTCGGG	60
CTCCACCAGA	ACCACGGACT	TGAAGGAGAA	GAGACTCTCG	GTTCCAGGTA	GCAGAAAACG	120
TGGAGTTTGT	GACACAGATC	CTCCTGGCCA	GAGAAGGATG	CTTGAGAATC	TGAGATTTAC	180
ACAGCTGTAT	TAGGTTGTCC	ACGATGACCG	GGCAGTAGGT	CTCTCTCTTG	GGGATTTCCT	240
CAGTGGTCTG	CCAGAGACGG	GCGTGAGAGA	TCACATTTCAG	AACGCACTCG	TCTTGGTTCT	300
CTATGTGGTT	CCTTGGATCA	TCAACAAGGC	TAAGCACTTT	CTCGGGAAGG	CCTTCTATTA	360
ACTTGGTCTT	GGTGAGCCAG	AGGGCCTGCT	TTACACCCTC	GAG		403

(2) INFORMATION FOR SEQ ID NO:135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

GAATTCGGCC	TTCATGGCCT	ACTCCATTTT	TCGAATGGCT	TATTTAGGCC	CAGCTCTTGC	60
GTTTGCAATG	TCCCTTCAGG	CCCAGAACTT	TCTCAGTCA	TCGTCAACAG	GCCTAGCTTC	120
TGCATCTGGT	CAGCCTTTTA	AGGCCAGCT	TTTGCTCAT	AAACTCAGCT	CCTGTTTAAT	180

GGCGGCCTCC CGGGTCCCAC TCGAG

205

(2) INFORMATION FOR SEQ ID NO:136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

GAATTCGGCC AAAGAGGCCT AGTTTTATTA CTTTGGTTAA GACATCAGTT ATTTAGTCT
TTGATAATTC ATTATCTAGA TAATGGTTAC TTTGTATTGT CTGTTTCTCG AG

60
112

(2) INFORMATION FOR SEQ ID NO:137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

GAATTCGGCC AAAGAGGCCT ACACAGAGCC CTTCACTACT TTTAATCTT CTAAATTGG
TGGTTCATGT TAATTAAATT ATTATTATTT TTTTGTGAGA CGGAACCTCGA G

60
111

(2) INFORMATION FOR SEQ ID NO:138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

GAATTCGGCC AAAGAGGCCT AAAGATGTTT TCCATGAGGA TCGTCTGCCT GGTCTAAGT
GTGGTGGGCA CAGCATGGAC TGCAGATAGT GGTGAAGGTG ACTTTCTAGC TGAAGGAGGA
GGCGTGCGTG GCCCAAGGGT TGTGGAAAGA CATCAATCTG CCTGCAAAGA TTCAGACTGG
CCCTTCTGCT CTGATGAAGA CTGGAACCTAC AAATGCCCTT CTGGCTGCAG GATGAAAGGG
TTGATTGATG AAGTCAATCA AGATTTTACA AACAGAATAA ATAAGCTCAA AAATTCACTA
TTTGAATATC AGAAGAATCT CGAG

60
120
180
240
300
324

(2) INFORMATION FOR SEQ ID NO:139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

GAATTCGGCC AAAGAGGCCT AGGTCCAGAA ACATTTAAAA AAAAAAAAAA GGGGGCTTGA	60
GAAAAGGGCT TCCAGTGCCA GGCAGAAATA TGTTTTCTT AATAGGGC	108

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

GAATTCGGCC AAAGAGGCCT ATGAAAACGT GGATTGCTT TGTAACTTG AGAATACATT	60
TTGTTGCCAA CAAAAGAGA GAAGAGAAGA GGAAGATATT GAAGAGAAGA AATCGATTAA	120
GAAAAAAATT AAAGAACTTA AGTTTTTAGA TTCTAAAATT GCCCAGAACC TTTGTAAGTA	180
TCATATTCCA ATACCATTCA AAGACAGTGG AAATATTCTT TTAAATGATT TCATTTTCTT	240
TAAGACCGAT TATTCATTAT TTGCTATTTT CATTTTGTTA TTATATGCAT GATAAATCA	300
CAGATACTCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

GAATTCGGCC AAAGAGGCCT AGGGTAAGAC TAGAGTGTTT TAAATCATCA ATAAAAAGTG	60
GAGAAAACAA AGGTATTCA GCGATTGAAT TCTAGACCTG CCTCGAGCCC TGCCTTTCCT	120
TTACTTTTAC TTTTTTTTTT TTTTCTTTG GAAGAGAGAA GAACAGAGTG TTCCATTNTG	180
CCCTATTTAT GTTTNTANTC GGGAACAAAC GTTGTTGTG TGTGTGTGTG TTTCTTGTG	240
TTGGTTTTTT AAAGAAATGG GNAGAAGAAA AAAAAAATTC TCCGCCCTT TCCTCGATCT	300
CGCTCCCCC TTCGGTTCTT TCGACCGGTC CCCCCTCAAC CTGCCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 167 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

GAATTCGGCC AAAGAGGCCT AGAGAGTCTG GATGACAAGC AAAGCTCAAT CTCAAAACAA	60
---	----

TAATTTTAA AGTAATGATT ATCTTAACCA TTCTTAAATC CTTCTGTCTA GTAGGAATCT 120
TATTCATGGG AGTGTCTGGA AAAGGGACAA AGAGCGGCTA TCTCGAG 167

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

GAATTCGGCC AAAGAGGCCT AGTGTTCAC AAAAGAATTG GAAACCATAG TCCTGAACTC 60
TCCCTAAGTA GTATAAGCTT TAAATAGCAC TCAATCCATA TTAAGTCTTC TTAGTGTAGC 120
ATGGTTGCTC TCATGCGTCT TTCTTATGTT TTAAATGGTG TAAATTTTAG TCGTTTGTCA 180
TTCAGAAGTG GCTTTGCAAA TACAAAATAT CTCGAG 216

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

TAATCTTTAC TGGTGAAAAG GATGGAAAAA TAAATCAACA AATGCAACCA GTTGTGAGA 60
AAAAAAAAAA AAAAAAAAAA CAAAAAAAAA AAAAAAAAAA CCTGAATGCG GAAGAGCTCG 120
GCTCCCGTTT AGCATTITGT ACTTAAGGAA ATAAAAAACC AACAAAGGAT CTCACATTTT 180
CTTAAAAAGT GAAGATTGCT GTATACTATT TATTCAACTT ATAATTTATG TTAATCTCTG 240
ATCTTTGTCT TTTGTCTATG CAAAGCATTT ATTTAATAAA GTTATGCATT CAGTTCTCGA 300
G 301

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 177 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

GAATTCGGCC AAAGAGGCCT AGTCTCTGTT AATCCTACTC TGCTTTAGCC AGAATAGCCT 60
AGTATTTTAT TTCTATTTTA TATATTGAGA TTTCTTCTAA CATTTCTTTT GATAAAAATC 120
TTCTGCTTTT TGAAAAGTGG TATGTATCAT ATTTTATGT TTCTGGTGTG TCTCGAG 177

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

GAATTCGGCC	AAAGAGNCGT	AGGGAAAGAT	TTCAGCTATT	AATCAACTGG	AGGAAATTCA	60
AAGCCAGCTG	GCTTCTCGGG	AAATGGATGT	CACAAAGGTG	TGTGGAGAAA	TGCGCTATCA	120
GCTGAATAAA	ACCAACATGG	AGAAGGATGA	GGCAGAAAAG	GAGCACAGAG	AGTTCAGAGC	180
AAAACTAAC	AGGGATNTTG	AAATTAAAGA	TCAGGAAATA	GAGAAATTGA	GAATAGAACT	240
GGATGAAAGC	AAACAACACT	TGGAACAGGA	GCAGCAGAAG	GCANCCCTGG	CCAGAGAGGA	300
GATTCTCGAG						310

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 353 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

GGTGGCCTTG	GGTCAAGATT	CGCACCATGG	TGGGCACAAA	CCCAGGAGAA	CACTTCTCTG	60
TAAACGTGTT	TTCATGCTGG	AGCCAAGGTT	TTGACTTGGG	TTTGGATTTT	TATTTATTTA	120
TTTATTATTA	TTATTACCAG	GTTGCATCTA	AAGGATGTTT	TGGAGGAGCA	CAGAGTTTGT	180
CTGGTGAGGG	TAGGCTCTGG	GCAGATTTTT	CTGTGAGTCT	CCCCTGCCTG	CGGCATCAGG	240
ATCATCCCTG	GTGCCCTGTG	GTGGCACCAG	GTGGCTGCCC	ACCCACAGGC	GTGGCCTTGA	300
CAGTGGGGGC	CATCTCAGCC	TGGGGTAGCG	ATCTGCCTCC	GACCTGCCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 283 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

GGCCTGCATC	GCAACAGCCA	GGAGGGCCAG	GCCACCCAG	GCAGGAGGCA	GTGGGCTGGC	60
AGCCACCCTG	GGCACAGAAG	AGCAGACGCA	GACAGTGCTG	GGCAACGAGG	GGCTTTCTTC	120
ATGGGCCCCG	CTGCCCTGTC	CCTCCCCCA	GGTCCCCACC	TTCTAGGGTT	AAAGTGCAGC	180
TGGGAGGGAG	GAGGCAGGCA	GAATTGGGGA	GCTAGAGAGA	GCCCAAGTGA	ACCCTGACTG	240
TCCACGCAAG	TCCCATGTCC	TCCTCGTCCT	GGAGTTCCTC	GAG		283

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 321 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGTTCCTT	TTGTTATTTT	CCTGCATCTT	60
ACAACGTTAA	GGCCTTGGTC	CCTGCTAATA	ATAAAATAAT	AATCAACTTT	ATAAAGAGCT	120
TACAATATGC	CAGATACTGT	ACTAAGTGCT	TTATATTTTT	TTTTTGGGTG	GGGGGTGGCT	180
GTTGGGCAGT	GTCTCGCTCT	GTCACCCAGG	CTGGAGGGCA	GTGGCACAGT	CATGGCTCAC	240
TGCGGCCTTG	ACCTCCTGGG	CTCAGGCCTC	CCGCCTCAGC	CTCCAGGTG	GCTGGGGCTA	300
CGGGCGTGCA	ACATTCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

GAATTCGGCC	TTCATGGCCT	ACGTAATTCT	GGAAAAGTGA	ATACTTGTGA	AGAGTCGTCT	60
TGAATGATTT	GTAAAAATC	CTGTTCTTAT	ATTCAACGAG	TTTCGAATCT	TTGTCAGAGG	120
AGTATTACCA	TTAGATTGAA	AAAAAGGAAA	ATAAATAATA	AACACTTTTA	AAAAAACTCC	180
CCATTCTCTT	ATTCTCACTT	TTAGGAAAAG	AGACTGACTA	ATATCTTCTG	CCACAAATAC	240
CGATGTTCTT	AAAAATATTT	ATGGGACTGC	TTTTGGCAAC	CAGCCCTATT	TTGTTTTTCA	300
ATCCCTTTTT	GCTCCCATCT	TTCCAAACTC	ATAAACTCGA	G		341

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

GAATTCGGCC	TTCATGGCCT	ACTCGCCTCT	ACTAAAAATA	CAAAAATTAG	CCAGGCACGC	60
GCCAGGTGGT	GCGCACCTGT	AATCCCAGCT	ACTAGGGAGA	CTGAGGCGGG	AGAATTGCTT	120
GAACCTGAGA	GGTAGAGGTT	GCACATAGCG	CCACTGCGCT	CCAGCCTGGG	CAACAAGAGT	180
GAGACTCTGT	CTCAAAAAAA	TATATAAATA	AATAAATGAA	AAAAAATAAT	TGTATAACAT	240
CTATACTATA	GCCTCGTAAG	CATTAGCTAC	TTAATATTTT	TGGTATATTT	AATAATTTTA	300
ATACAGCATT	TTTGATTACT	AGTGAACATG	AATATTTTCC	CATATTTGTT	AATTATACTT	360
TCCTCTTACA	GAAATTCTGT	TTGTGTCCTT	CACCCTTCAC	TCGAG		405

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

GAATTCGGCC	TTCAGGGCTC	CTTCTTCCTA	GGCTAGTATT	TATCCCACTA	CATCTGACTC	60
ATTCTCTACT	ATCGCTGTTG	ATTCCTCTT	GGGTACTAAA	TCTGTTGAAC	ATGTTGCCAG	120
GCTTACTGCT	GGTATTATGG	GATAGCATTT	GCCTGATGGC	AGCTTCTAAA	GGAGACTCCG	180
ATGGCACTAA	GCAGTTTCCA	AAAGTTTATC	TTGCAAGTTC	AACCCAATTC	GAG	233

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

GAATTCTAGA	CCTGCCTCGA	GATGTTTTTT	TCGTTATTTG	AAATCTTTC	TCTTTTATTT	60
TTCAGCTCCC	AGATCCTCTC	CCTCTCTTTA	GCTTTCACCTG	TGTTTGATAT	CAAGAATATG	120
AAATGTGAAT	TCCACGGACT	CGAG				144

(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

GAATTCGGCC	TTCATGGCCT	AGGCAGGAAG	GAGGCTGGAA	TAAATAAAAA	TAAAAATAGA	60
CAAGTAAGAC	AGCATAAATA	ATACATTTTT	AAACATGTCA	ACATTGATAA	TACAAATGAAG	120
ATTTACCATA	AAAAGTATCA	TATCTAACCA	AGATATGCAA	AAGATGCATT	CAGTAAGCTG	180
TAACGGTGAG	AAATGTAACT	GTGAAATCAG	CTCACCAGTT	CAAGTCACTA	GGTTTGCCAC	240
TTGGACCGTC	TTGGTTTCAG	CGAGCATAGC	GAGTGGCTGT	AAGAAATTGT	CCATGCCACC	300
AATTCCTACTG	CTACTTGCCC	AGGTGGTCTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

GAATTCGGCC	TTCATGGCCT	AGGAAGTGGA	GGGAAGCTGG	GTCGCTGCTG	GAAGGGAGGG	60
AGGCTGACTC	TCTACCCCTC	ACCTCTGCAA	GGAAGTGAAG	CCTGTAGGGT	TGCGGCTGTC	120
ACTGGCTACA	GGCGGCATCT	TTCTGTAAAA	AGCTTTTCAG	GCATGAAACC	CATTTCTGTA	180
TGGACTGGGC	TGTGTTGACG	GTGGTGCTTG	GGCCTTGCTG	GCCAGGCCTC	TCTGGGTCCC	240

CTCCCTGGCC TTTGCCTTCC TCTCACCTTC TCGAG

275

(2) INFORMATION FOR SEQ ID NO:156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

GAATTCGGCC	TCATGGCCT	AGAGTCATAG	GTCAGACCAC	TTTCTAGGAG	CTGTTCAGTG	60
ATAAAATTAA	TAACAGTGAC	TTTGAGTCA	AAATAGATT	TTAAAGTACT	TGATTTTCTC	120
TTTGATTGG	AAACATCTTT	GTTTAGCTTA	ATTGAAATGA	TCTAAAATAT	TTGAAGGATT	180
TTATACTTTA	CACAGAGGCA	TGTATTTGGA	TAATTAGCTT	TTATTAAACC	CAGGCTTCCT	240
CGAG						244

(2) INFORMATION FOR SEQ ID NO:157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

GCGATTGAAT	TCTAGACCTG	CCTGAACCCC	ACCCTTCACG	TCCTACTTGG	GCTGCCAAAG	60
TCATCTTCCC	AAAACATGAC	TTTCCTCAG	TCACTTTTCT	TATTAGATT	TATCATATTC	120
CACATCCCTT	CCCTGGCCCT	CAAGGGTGCC	TGTAACCTAG	AACCATCTTA	CCTTTCACC	180
CTTGTTTCCA	AACCTCCGC	TTTACTTAGA	CATGCCTTCC	CATTTCCTC	CCGACCCACC	240
CCCTCGAG						249

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

GAATTCGGCC	TCATGGCCT	AGAAAAAAC	AAGTAGTTTG	GCAAGGAGAG	CAGAAAAATA	60
AAATTCCTACT	GTGTAGGCAT	TTGGAGATT	AGCAAGAGCA	ACCTAGAGTC	TGCCCCCAGA	120
GACACTGCAC	GTTGTTTCTG	ACACAGAGGA	TGCACCTAATT	CTATTTCTTG	TGCCACCTGA	180
AAAAATCATA	ATTTGAGAAG	AGAACTGTT	AGGCCATTTC	TAGTGAACTA	TTTTTCCAAA	240
CCCTCACGGA	ACCCTGAACA	GGCGTGTCT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 298 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

GAATTCGGCC TTCATGGCCT AAGCTTGCTC ACTCTTCTGT GTGTTTGAAA TAATGGTAAA	60
ATACAATAAT ATTGTCAAGC ACAGTGGATC GGAGATTTT CTTCCTCAGGA CTATTCTGCT	120
TATAGGTCTA CTTCTATAG CTATTGTCA TTGTCTCTCT GGTCTTCTC TTTTCTTCTC	180
TCCTGTGCTA GATGCTCTCT CTTCTATCC CTCCTCTCT TCCCACCCC ACCTCCCACT	240
TCTCTGTTA TATCCTGATT TTGGTGAAC ACATCCTCCA GGCTCCCTGG CACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 239 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

ATGGCCTAAG GTGCCCNAGC TTGCCAATTA ATTCCCAGTA GAAATTTTAA AATGTTAAAG	60
ACAGTAATTA AAAAAAAAAA AAAACACAC TGTTTGGACA TTTTACCTCG TGCTTTGTGT	120
GTGACTAGAT TATGCACTAG AATTTCATTC AGTATTCTTC CAAATAAGTT ATTTCCCAAG	180
TGTTCCGCTGG TATCTAACCA ANTANTCAAT AAAGTATTCT TGCTAAGTNG GCCATGAAG	239

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

GAATTCGGCC TTCATGGCCT AATATCATGA TCACTGAAAT TACATCTAGT GAAACACACA	60
CGTGCTTATC TGCACGTGTG TGTAAGTTAG AAAGAAAAAA CAAAGGCCCTA ACAGTGATTG	120
TCTTAGGTTG ATAGGATAGT GGGTGGGATT TGCAGAATTT TTGTATCTGC AGAATTTTGT	180
CAAAGTGCCC ATTAGTTTTG TAAAGAAAAA AACCTAAATG TATAACTTCT AAAGAGATAA	240
TTTTTCTTT CATGTTTTTG CTACCTATAT CTAGGAAAAT AACTTAGAAT TGTAATTATT	300
TTGAAGCTCT GGAATTATTA TGTTCAAAAA TTACAGAACC AAAAAGTCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 469 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

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GAATTCGGCC TTCATGGCCT ACTTGCTGTG GCTGACTCGG TTATTGACTT TACTTCTTTT      60
CTTTTCAGGT TTTTATGGGA CTGTTTCTAG CCCTGATTCA GGTGTGTATG AAATGAAGAT      120
TGGCTCCATC ATCTTCCAGG TGGCTTCTGG AGATATCACG AAAGAAGAGG CAGATGTGAT      180
TGTAATTC AATCAAACT CATTCAATCT CAAAGCAGGG GTCTCCAAAG CAATTTTAGA      240
ATGTGCTGGA CAAAATGTAG AAAGGGAATG TTCTCAGCAA GCTCAGCAGC GCAAAAATGA      300
TTATATAATC ACCGGAGGTG GATTTTGTAG GTGCAAGAAT ATCATTCTATG TAATTGGTGG      360
AAATGATGTC AAGAGTTCAG TTTCTCTGT TTTGCAGGAG TGTGAAAAAA AAAATTACTC      420
ATCCATTTGC CTCCAGCCA TTGGGACAGG AAATGCCAAA CAACTCGAG      469

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(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

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GATTATTCA TTCTTGATTA AATGCACTGA AAAGTAAAGG GTCTGTTTGT GTCATGTTCA      60
TGAAATGCG GTTAGAGAGG TGCTATTCAA GTGATTCTGA AGGCACCCCA AGGTATATCT      120
GTAATTTAAA GATTACTGCA AATATCTTTA CTTTACTGTG GGTTTTGTAGT ACATCTGTTA      180
ATTTAGTGTT TCTTTGTGTG TTTGTAGAC TAGTGTTCTT CCATCCTTCA ACTGAGCTCG      240
AG

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(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

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GAATTCGGCC TTCATGGCCT AGCATTTTTT TTCTTTAAAT TATTGTATCC ACTAGTTCTT      60
GCCAGTATAA AGGAATACAA TTGACTTTTG TGTGTTTCAT ACGCTACAAC CTTTCTAAAT      120
TCACCTATCA GGTCCAGAAC TCTTCTACTA ACAATGCACT TTTATAAAGC CCTAACACCT      180
CTCCTGATCT CTGTCTCACC CTCCCACCTA TCTCACTGTG GGATGGGAAG GAAGTCAATG      240
GAAACACAG GAGCGCATT TAATAATAGC CCACATGGTA TACTCGAG      288

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(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

GAATTCGGCC	TTCATGGCCT	AGCTCGATCC	AAGAAGAAAA	ATTAAATGA	CAGCTTTTCC	60
CATTGATATA	ATCATCTTAC	TTTGCTCTCT	ACAAGAAATA	TGCATTAGGA	ACCTTCATTA	120
TAGGTCCACA	GAAATAGCAG	AACACAAAAG	CGCCCCCCTA	CCCCCCCGCC	CCGGTAACCA	180
GAAATACACA	GAGGCAGAG					199

(2) INFORMATION FOR SEQ ID NO:166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

GAATTCGGCC	TCATGGCCTA	GAATTAACCA	ATTAAGAATT	AATAAATTAC	TTATAAAATT	60
AAAAATCAGG	AATACCAGGC	TTAATGCATT	CATTTATTCT	ATTTAGCAAA	CTTTTTTTTT	120
TTTTTTGAAT	GCCCACAATG	TCCTAGGTTC	TGGAAATACA	AAATTACTTG	GTACCAGTAA	180
CTCGACTGTC	ACCTTTCCAG	CCATGGACTT	GGTTCAGACA	AACCCCCAGT	CCACGGTTGT	240
CGTCCACTTG	CAGTGCCCCG	CGACTGTGGA	TATATGCTGG	GGATCCCAAC	ACAACGCAGC	300
TACTCTCGAG						310

(2) INFORMATION FOR SEQ ID NO:167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 187 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

GAATTCGGCC	TTCATGGCCT	AGTAAATATT	TTCTTCTACT	TTGTGTTTTG	CCTTTTTGTT	60
TTCTCAGCAT	TATTTTTTGA	AGACAAAAAG	ATTGATTTTG	AAGAAGTCTA	ATTTATCAGG	120
TTTTTTCTAG	TAGTTTGTAG	CGGATTTNTG	CATGCTGCTT	TTAAAAAAT	CTTTGCTAAC	180
CCTCGAG						187

(2) INFORMATION FOR SEQ ID NO:168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

GAATTCTAGA	CCTGCCTCGA	GCCTTGCCCA	GAATCAGCAA	GTAAACTGCA	CTAATTTGTC	60
TTATATTTGA	CTTTCTAACA	CTGATTTTTC	TGATTTTTC	CTGTTTCGACC	CTCCAATTTA	120
TAAAAATGTG	TATAATTGTT	CTGCTGCTTC	TGCTTTTGCC	TGCTTTGGCT	GCTGCATATA	180

CAGGTGAAGA TCTGGAAAGA AATGATGGAT CTACAGAAAA ACCCTACTTC GTAACCCCTA 240
ACCTGCATGG AATTCTGATC AAGAAGCAAC TCGAG 275

(2) INFORMATION FOR SEQ ID NO:169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

GAATTCGGCC TTCATGGCCT AGTTTCACAT TGTCTGTACT GTGTTGTGCA GTACCAGAAG 60
TTGCTGGTAG CTAATTGGTC TTCTGGGACC TGCCATTGCA GACGTGGTGA TTGTAATCTT 120
AATCTTGTG AACAGGATG GATTATGAC TGGGATGGCC GGAAGCCACA CCAGACACCC 180
AGTCACCTGG TCATGGGAGA GGTACTTTGT TGGCTTTTCA TAGTACTTAA CACTGTGAGC 240
TGCTTCCTGA AGTGGCACTC TTAAGGCCAG GTGCCCCCAC CCTCGAG 287

(2) INFORMATION FOR SEQ ID NO:170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

GAATTCGGCC TTCATGGCCT AAGACAGACA TTTTGGCAG AGCATAGATG AAAATGGCAA 60
GTTCCCTGGC TTCCTTCTG CTCAACTTTC ATGTCTCCCT CCTCTGGTC CAGCTGCTCA 120
CTCCTTGCTC AGCTCAGTTT TCTGTGCTTG GACCCTCTGG GCCCATCCTG GCCATGGTGG 180
GTGAAGACGC TGATCTGCCC TGTCACCTGT TCCCCACCAT GAGTGCAGAG ACCATGGAGC 240
TGAAGTGGT AAGTTCCAGC CTAAGGCAGG TGGTGAATGT GTATGCAGAT GGAAAGGAAG 300
TGAAGACCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 195 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

GAATTCGCCT TCATGGCCTA CACCAAGTTG AATCCCTATG CAGGAGGAGA CGGCCTTCAG 60
AACAACCTGT CCCCCAAGAC AAAGGGCACT CCTGTGCACC TGGGCACCAT CGTGGGCATC 120
GTGCTGGCAG TCCTCCTCGT GCGGGCCATC ATCCTGGCTG GAATTTACAT CAATGGCCAC 180
CCCACATCCC TCGAG 195

(2) INFORMATION FOR SEQ ID NO:172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

```

GAATTCGGCC TTCATGGCCT ACACTCCTGG TCATTTTGCA TTTTATCCAG CTTTTTTTCA      60
TCAACCATGT TATCCTGACA GACACATTTA TTGGATATTT AGTTGGAAAT ACCTTATGGT      120
TGGTTGCAGT TGGCTATTAT ATCTATGTAA CTTTCTGGG ATACAGTGCA TTGCCATTTT      180
TGAAAAATAC AGTAATTCTT CTGTATCCAT TTGCACCTCT GATTCTGCTC AACTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

```

GAATTCGGCC TTCATGGCCT AGGCTAACGT AATTGAGAAA ACCAAATGAA ATATATCTTG      60
ACCAATAATT TAAAACCATA TCAGAGATTC AGTTTGTTTC TGTCTTCTGC TTTACTGATT      120
TTAGGATCAG CCTCATACAA AAGGGTAATG GTGGCAGCAG CTCCAGAACT CATATCATAT      180
CCTCCCATGT TAAAGTCAAA TGAGAAAAGT CTGTCTTCGC CCCAGGATCT CGAG      234

```

(2) INFORMATION FOR SEQ ID NO:174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

```

GAATTCGGCC TTCATGGCCT ACTCAGTTCC ATTGTTAAGC AAGGAAAAAC AAACAATACA      60
TTGAATTTGA CAACCCACTG AAGTTGCAGA TAATGAGGAC TTACCATGTG ATACCATTAT      120
TCATCTGGAC CTATATGTTT CATAAGTTG ACACCATCCT ATTACAAGAA AAACCTAACA      180
GTTATTTATC AAGCAAAAAG ATAGTGGGTC TGACAAAAGA TGACGGTAAA ATGCTACGTC      240
ACACCCCTGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

GAATTCGGCC TTCATGGCCT AAACCACTGC GCACCATATT TCTTAAGGAT GTTCTGAAGA	60
CCCATGAATG TCTGGTCAAG TCTGCTGATC TCTTAATGAG GGACAACCTG TTTGAAATAA	120
TAACAAGCTC CAGGACATTG TACGTACAGG CAGACAGTCC AGAAGACATG CACAGCTGGA	180
TTAAGGAGAT TGGCGCAGCT GTCCAGGCC TCAAGTGCCA CTAGGCCATG AAGGCCGAA	239

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

GAAAACCCCA GATATTCCTT ATTATGGAAG AAGAAGCAGG AAATATGTTT TTGAATAATG	60
TGGGTCAGAG AATTGTGCAT TTATTATTGC TAGGATGCAT ATACACATTG AACTCAGTCA	120
ACTTACTCTC TCTAAATTAT CTCACCGGTG GAGACATTGC CTCAGGAGTC GAGCCCTGTG	180
GTGTGCCTCC TGCTGTCACC ACATTGACC ACCTAAGTGA CCCCACTGTG GTCACCTTTG	240
CCACCAATCT CGAG	254

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

GAATTCGGCC TTGCCAGTAT TCATGCTGTT GCTTCAGTCA AGAATGAATT CCTCAGCGCT	60
ACCTCTCTTG ACCTTCACAT CTTACTTAGT GCAAATGCTG TCTCCTCCTG AGACTTGCCT	120
GACTTCGGAT ACTCTCCCTG TGACATCTTA TCTAAATGT CAAGTGAGAC TCGAG	175

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

GAATTCGGCC TTCATGGCCT AAGTGGCTGT GTGGTATTTT CTAAGTATTT TTTAAATTTT	60
TCTCTCATG ATACCCTATA AAAATGCAAC TGTTAAAGAA TTTGTCTTTC TTTCTCATTA	120
TATTCTTTCC AGAGTATATA ACTAATTTAT TCAGCATTCA TTCATTGAGC AGATATTTGT	180
TGAGCACTAA CTATGTTTCTG GCACTGGGCA GGGATATCGG GATACCAAGA AAGCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

```
GAATTCGGCC TTCATGGCCT AGAAAATAAT TTAGAGAAAG AATAGAAAGT CATGGAAAAT      60
CTCATAGGTA GGAGACAGAA GAGAGAACAT TGTAATAAG TTTAAAAAAG ATAAGAAAAAT      120
CAGGATAAAG TAGTATGGAC TCTGAGGTGG GAGAGAATTT TAAGATTAGC AGGAAAGTAG      180
TGTAAGTTGGT ACTTTTGTAGT TATTAAACAAA GCACTCACTT CTTACAGAGT CTCGAG      236
```

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

```
GAATTCGGCC TTCATGGCCT ACGAAGATTA TAATGTATTT TTATTCTGTT TTCAGCTTCA      60
TGTTTCCTGT TGCAGGTGGG ATAAGACCCC CTCAAGGCCT GATGCCGATG CAGCAACAAG      120
GATTTCTTAT GGTCTCTGTC ATGCAGCCTA ATATGCAAGG CATTATGGGA ATGAATTACA      180
GCTCTCAGAT GTCCCAAGGA CCTATTGCTA TGCAGGCAGG AATACCAATG GGACCAATGC      240
CAGCAGCGGG AATGCCTTAC CTAGGACAAG CACCCTTCCT GGGCATGCGT CCTCCAGGCC      300
CACAGTACAC TCCAGACATG CAGAAGCAGT TTGCCGAAGA GCAGCAGAAA CGATTTGAAC      360
AGCAGCAAAA ACTCTTAGAA GAAGAAAGAA AAAGACGCCA GTATCTCGAG      410
```

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

```
GAATTCGGCC TTCATGGCCT ACACATTTGC ATTGTCTGCC CATGGACTGG TTGGAGCAGA      60
AACCTCCATA CCTCAGTCTC TTGGTATTTG TCTGCCCCAA CTGCTGCTTT TTGTTGGGAT      120
GTTTGTGTGT GCTGGGGTCT CGGCAGCATC GGCTGCTTCC CGGTGCGCAC TGACATGCAC      180
TTGTTCTCCA CGATGGCTTT CTCTACCTTC TGAGATGCTC CATTATCAGT CCTGCCTTTG      240
TTCCGGAGAG TTGAGATGGT ATCACTTCTC ATCCATCCTT AGAAATACCC CTCTCGAG      298
```

(2) INFORMATION FOR SEQ ID NO:182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

```
GAATTCGGCC TTCATGGCCT AGGGGGCTGG TAGTGAAATA TTTGGTACTG AAAGTGTGAA      60
GACCTCTGCT GGGGACTGAA CAGAGGGAGT GTCTTCTGCT GGTGGTGTGA AATCTATCTC     120
ATCATCAAAA TTATCTTCAA ATTCCTTAAA GTCTATTTCT GGGTCCTTAC AGCAGGATAC      180
ACAGTTTGCA ATTAACACTA TTAATATTAT TAAACTGCAC ACACACAGGA TCACAAAAGA      240
TGAGGAAACT TCTGCAGCAG GTGGCGCTCG AG                                     272
```

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

```
GAATTCGGCC TTCATGGCCT ACTACTTATC ATCCCTGCTC ACACACCCTT GTCCAAGGCT      60
TTATGCATCG GATTTATTTT TCCAAATCAA GAGGACAGTG ATAGATGCAT TTTCCCCAGG     120
CTGTCTCAGA AAGGTCGCTA AATGTATACT GTTGTTCAGAA TTGCTGAGAT CTCCCCCAC      180
TTTTGGTTTT TGCAGCAGTA AAAACTCTTT CCACTGTGAC TTATTTTCTC TCTCAGGCAG      240
CAGACTCGAG                                     250
```

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 399 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

```
GAATTCGGCC TTCATGGCCT AGATCTTCTC CCCATTGAGC AAAACTTTCC CATTCCGGTT      60
AATGGTTTTG ACAAGCAGGG CACCACGGGG CATAAAATTG TATCATCCAG CCTCCTTCCA     120
GCAGCTCTCT CCAGTTCTTG TCTGTGATGA TCGGTACGTT GCTCTGCCGC CTGTGGGTCC      180
AGGGAGCACC CCCAAGCAAC AGTACCAGGA CTGCCAGCGG AACTGCAAGA CTCCTGGAGG      240
GTGCCATGTC TGCCACTTGC CCACCTCACA GCAAGCGTGG CGGCCCAACA CTAGGTTTTT      300
TAAAAACTGT GACTATCAGT GTTTTAAAAA TTGCCCGGTA ACTCTAGACT TCAAAAGTGG      360
GATAAGTAAT GATAAACCAA TAATAAACCC TGCCTCGAG                                     399
```

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 185 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

```
GAATTCGGCC AAAGAGGCCT AAAAATTAAT ATTACCTTAT GACTGCCTTT ATCATGACTC   60
TCTTAGTGGG GATTTCTGTC CTCCACATGC CCTGGGGGAT GTGCAGCCCC CGTGCACTCC   120
CCGCCTTGGC CGGCCCTTC CCCCATGCCC AGGTAGACTC TGAGCTCTTA GCCCAGCAAC   180
TCGAG                                         185
```

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

```
GAATTCGGCC AAAGAGGCCT AGGGAACATA TCTTAAACAC TGAACCTCTT TTCAGCAAAT   60
TGGCTTTCTA GTTCTCTCAGC TCTCTCTTAA CACCTCTAAA TCTCTTCCTT GGCAAGATCA   120
TTTATTTGCC TTGGTTTATG GTGATACTCT TCATTGTTAT ACTGGTGGGT GATTGTTTAA   180
ATTCATAGCT GTTTTTTCTT ACTTCAGGAA GATGACACTG CTGGCTCTGC TGGCTCTGAT   240
GTTTACCTTG TGGCTAATGC CTGTGTTTGC CTGTGTTTAC ATTTATTCCA CGATTCATTT   300
GTAAACATTT ACTAAGCTCG AG                                         322
```

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

```
GAATTCGGCC AAAGAGGCCT ACTCATAACA GCGTCAGAGA GAAAGAACTG ACTGAAACGT   60
TTGAGATGAA GAAAGTTCTC CTCCTGATCA CAGCCATCTT GGCAGTGGCT GTTGGTTTCC   120
CAGTCTCTCA AGACCAGGAA CGAGAAAAAA GAAGTATCAG TGACAGCGAT GAATTAGCTT   180
CAGGGTTTTT TGTGTTCCCT TACCCATATC CATTTCGCCC ACTTCCACCA ATTCCATTTC   240
CAAGATTTCC ATGGTTTAGA CGTAATTTTC CTATTCCAAT ACCTGAATCT GCCCCTACAA   300
CTCCCCACCT CGAG                                         314
```

(2) INFORMATION FOR SEQ ID NO:188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

```

GAATTCGGCC AAAGAGGCCT ATTATGCTGG TGCTGTCTAC TAATTTCAAG AAAAACTACA      60
AGTCTGGCTA GACTCTGCTA CCGCCTAGCA CTGAGGTGTG GTCCTTTATC TGTTATTACA      120
TTCTTCGTGA TAATGAAATT CTGAAACACA TGCTCCAGGC ACCTTTGTAA ATGTGAAGGT      180
GAATAAAGTA TTTGTTTGTG GTCTGAAAAG AGATCTTTGA AATGTTAAGT TGCCACAGAC      240
CCAGACCAAG GAGCCTGCTG AGAGTTTTAA AGGCTCTTAT TGGATGACAG TAGATTCTTT      300
CCTTGAAATG TCTATAATGA ATATTCAAGA ATGCTCATTC TGCATGAAAT TTGCAATTTT      360
AATTATCAGT GAAAGAAAAG ATTACACAGT GCTAAATGAT TGCCATGGAA AAGTTATGGC      420
TACCTCTTGG AGTAGAGAAA ATCTCAAAGG CCGCTACTCG AG                          462

```

(2) INFORMATION FOR SEQ ID NO:189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

```

GAATTCGGCC AAAGAGGCCT AGTGGGCAAC TTGGAGAAGA GTGAAAAACA CTAAAGAATC      60
ATCTCTTTTC CGAGTCACAA AGTCCCATGA ACTTTGTGAC TCAGAGACAC TTTTCGTGAA      120
AATTACCTTT CGGCGGGACA CCGTCTCAGG GCAGCTTTT CAAGGCTTCG CTTGACATGA      180
TTTCCTTCCC TTCATCAGTC ACTTTGGATC CAGCTGAATA TCTCTCTCGG GTGAGAGCGG      240
ATGTGGACTG GCCTCCACA GAAGAAGAGT AGGTGGCTTT GGTGGGGGTT GGGGTGCGGG      300
CTGGCTTCCT GGTCTCGAG                                          319

```

(2) INFORMATION FOR SEQ ID NO:190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

```

GAATTCGGCC AAAGAGGCCT AGTGAAGAAG AAGAGACTGT NAAATAATTC TGCATATCCT      60
CAGTGGATAA TTCTGTNACC TATCTGTCAG CTATTCCATA TCAATAAAGG ACACAGCTGG      120
TAATCCAAAA GGAAAGGATC TCTTGATGAA AGTGTCTGTC CATTCTTATT AAAGTCAACA      180
TACAAGATAC ACTCTTAGTG ATTTTGAAC CCATAATTAT ATTTGTCTGA TAATAATTGG      240
CACTTAACGG TTACAGAACA CTTTCACTGA TATTTTCCTT AGTGAATCTT AACACAATT      300
CTACCAGTAA TTTCTAATAT TTGCCATGAT TAGACTTTCA AAATTAGTCC ACGCACTCGA      360
G                                                                    361

```

(2) INFORMATION FOR SEQ ID NO:191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

GAATTCGGCC	AAAGAGGCCT	AAGAAACATG	GCGGCCGCGA	CGTTGACTTC	GAAATTGTAC	60
TCCCTGCTGT	TCCGCAGGAC	CTCCACCTTC	GCCCTCACCA	TCATCGTGGG	CGTCATGTTC	120
TTGAGCGCG	CCTTCGATCA	AGGCGCGGAC	GCTATCTACG	ACCACATCAA	CGAGGGGAAG	180
CTGTGGAAAC	ACATCAAGCA	CAAGTATGAG	AACAAGTAGT	TCCTTGGAGG	CCCCCATCCA	240
GGCCAGAAGG	ACCAGGTCCA	CCCAGCAGCT	GTTTGCCGAG	AGCTGGAGCC	TCAGCTTGAA	300
GATGATGCTC	AAGGTACTCT	TCATGGACCA	CCATTGCTG	TTGGCAAGAA	ACGGCTTTAC	360
TTACAAAACA	GTCTCGAG					378

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

GAATTCGGCC	AAAGAGGCCT	ACTCTGAATT	AATGCAAATT	CCCGTTGTAC	TGTATTTAAT	60
TATGCACAAA	ATGGTGCCT	TGACTCAGAT	TTCAGTGAAG	AACTTCATTT	TTTTACTTTT	120
AAGTCTCCAA	GTAGGAAATT	CAATTAGCGT	TATGAAAGAA	ACACTAAAAC	TCGAG	175

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 700 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

GAATTCGGCC	AAAGAGGCCT	AGGCAGCAAT	GTTATCTGTC	CTTCATTCTT	GCATGTTTTT	60
GGAAATTGCT	TTTGCTTTTA	CTTTTGGTCG	TCATGGCAAT	CACGTGCCTT	CTCTGGTTCA	120
TTTTGCACAG	ACCTGCCTAG	AGCTGGAACG	TTACCTCCAG	AGCGAGCCCT	GCTATGTTTC	180
AGCCTCAGAA	ATCAAATTTG	ACAGCCAGGA	AGATCTGTGG	ACCAAAATCA	TTCTGGCTCG	240
GGAGAAAAAG	GAGGAATCCG	AACTGAAGAT	ATCTTCCAGT	CCTCCAGAGG	ACACTCTCAT	300
CAGCCCGAGC	TTTTGTTACA	ACTTAGAGAC	CAACAGCCTG	AACTCAGATG	TCAGCAGCGA	360
ATCCTCTGAC	AGCTCCGAGG	AACTTTCTCC	CACGGCCAAG	TTTACCTCCG	ACCCCATTTG	420
CGAAGTTTGT	GTGAGCTCGG	GAAAATTGAG	CTCCTCTGTC	ACCTCCACGC	CTCCATCTTC	480
TCCGGAAGTG	AGCAGGGAAC	CTTCTCAACT	GTGGGGTTGC	GTGCCCGGGG	AGCTGCCCTC	540
GCCAGGGAAG	GTGCGCAGCG	GGACTTCGGG	GAAGCCAGGT	GACAAGGGAA	ATGGCGATGC	600
CTCCCCCGAC	GGCAGGAGGA	GGGTGCACCG	GTGCCACTTT	AACGGCTGCA	GGAAAGTTTA	660
CACCAAAAGC	TCCCACTTGA	AAGCACACCA	ACGGCTCGAG			700

(2) INFORMATION FOR SEQ ID NO:194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:


```

GAATTCGGCC AAAGAGGCCT AGAAAAATAC TTGGGCAGAA AGAAAATATC ATCAAATAAC      60
ACCTATTTCT TTTCAGCTAT AGAGATGGCT GGATATCAAA AGCACCACGG GAGCTTTGCA      120
ATTGTGCTGCC TCTTTTCAGC CCTCAGCTTG ACTCTCAGTT TTCAAGAGGG AGAAAATGAA      180
TGTTTCCCAG CATTCTCTGT CCTTTGCTCC AAAGAAGAGA GCAGGTGTTG GCTTCCAAAC      240
CTTCCGTATT TTCTTATTGC TGTTAGGGGG ATCAACTGCA TGTTTCCTGA GGGAAAAGGG      300
TGGCTCACTG ACCTACTTGA AGGCATTCTC TCAGTGGAAG CTGGGCAAGA GAATCCAGGG      360
ATTTCTTTTG CAGGTTTCTG CGCAGTGCCC CTGCCATCAA GCTGCCTAAA ATGTGAATAT      420
TGCTTCCCTG CGTTTCAGAG GTGGCCGCTC GAG                                     453

```

(2) INFORMATION FOR SEQ ID NO:195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

```

GAATTCGGCC AAAGAGGCCT ACAAATGTG AATGGAACAA ACCTGCACGT GTACCCTTGG      60
ATGTGTGGAT GTTCTTTGTT TTTATTTGTT AAACCTGATG TCTTGTCTGT ATGACACATT      120
TATTGGAAAC GTTTTTTCCC TATTCTGTGT CTGTATTTT ATTTTCTCGT GTTCTCCAAA      180
GAGCAGATAT TTTAAATTTT TATATAAATC CAGTTTGTC ACATTTTTAA AGGGTTCATG      240
CTTTTTGTAT CCTATTTTCA AAAACTTTGG CTACTTCAAG GTCACAAAGA TTTTGGATTT      300
GTTTAAATCT ACAAGTTTTA TAGCTTTGAC TTTTATATAT AAGTCTGATT CATTTTGGAGT      360
TAATTTTGTG GTACAGTGTC AATTAAGGGT CTAGGTTCAT TTATTTTCTT ATGAATATCC      420
AATGGTTCCT CGAG                                     434

```

(2) INFORMATION FOR SEQ ID NO:196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

```

GAATTCGGCC AAAGAGGCCT ACAAACACAG AACATTTCCA TCGTTGCAGA GAGTACTATT      60
AGAGAGCAGT ATTCCAGAGC CTGTGATCTT AATCACTACA CCTAAAGCCT CCCAGTTGAC      120
AAAGTTACCA CCTTTTTTTG GTGTGTGTGC ACGTGCGTGT GTGTGTGTGT AAGTATATAT      180
AATTTAAATC ATTCCATTAA ATTTACCTCT GAAATTCAAA AGACTGAAAC AGATCTTCTT      240
TTTATCAAT AAGTTGATTG CAGAGATTAT ATTGGTGTGT ACATTTTCAGG CAACCTGCTC      300
ATGAAATTAT CCATTGCTCT CGAG                                     324

```

(2) INFORMATION FOR SEQ ID NO:197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC	AAAGAGGCCT	ACTCCTCCGC	CTGCAACCAT	TGTTTCCTAC	CACTGGATTA	60
TTCTGAAGCA	AATTTTAGAC	ATCATATATA	TTTATCTCTG	AAAGAGGACT	CTTAAAAACA	120
TGCACTTATA	CCTCTATTAC	ACTGACAAAA	TTGTAACAA	TTCCTTTATA	TTATCAAATT	180
TCCTTATTGA	GTCCTGATG	TTCAAATTTT	TGATTCTCCA	GATGCTCCAA	ACTTCCAGAA	240
ACACAGATTC	CCAGATGGAA	TCCTGGGGAA	GGCTCGAG			278

(2) INFORMATION FOR SEQ ID NO:198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

GAATTCGGCC	AAAGAGGCCT	ATTTTCTAAT	AAAACTATT	TTATGGTAGG	TTTTGTGGAT	60
TATTGAATAC	AATCTGGCAT	TCTGTTTAAT	ATGTATGTTT	TCCTGAATGA	GGGGGTACAT	120
TGTAATTTTA	ATTATTAAC	TCACAATGTT	TTTGTTTTTA	AAAATAAAAA	TTTTAGGAGC	180
AAGCAGTGTT	CCTGCCTTCT	TTTCTGAAGA	TGATTCTCAA	TCCAATGACT	CAAGTGATTC	240
TGATAGCAGT	AGTAGTCAGA	GTGACGACAT	AGAACAGGAG	ACCTTTATGC	TTGATGAGCC	300
ATTAGAAAGA	ACCACAAATA	GCTCCCATGC	CAATGGTGCT	GCCCAAGCTC	CCCCTTCAAT	360
GCAGTGGGCT	GTCCGCAACA	CCCAGCATCA	GCGAGCAGCC	AGTACAGCCC	CTTCCAGTAC	420
ATCTACACCA	GCAGCACTCC	ACCTCGAG				448

(2) INFORMATION FOR SEQ ID NO:199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 187 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC	AAAGAGGCCT	AACTTTGTGA	ATTGGAATTG	GGTCCCGCTT	AGTTCTTGAA	60
TTGTATGAA	AATCCTATAT	CTGTTTGTAT	ATTGCAAAC	CCTTTGTATT	ATAATTGTTG	120
ATATTTTCCC	TTTTTAAAAA	ATACCATTGA	AATCAGCATG	ACAAAAATAA	CACTGTGGGC	180
ACTCGAG						187

(2) INFORMATION FOR SEQ ID NO:200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

GAATTCGGCC	AAAGAGGCCT	AGACCAGAAT	AAGCCTTTTA	AGGTAAACCT	CAAAATTATC	60
ATTTTATGGT	AATACTGACC	ATTTTAGTCC	CCTAGGTTTG	ACATGGGAGA	TAGTGACTAC	120
ACTGGTGTCT	GACTTTTTTC	CTAGAGATT	CTCCCTGAAA	AATACAAGGG	CTGTTGGTGA	180
GAGCAGACTT	GAGGTGATGA	TAGTTGGCCT	CTGGTCTACA	AAGATTTTCAT	AACTCCTTGG	240
AAAGCTTCTT	ATAATCATTC	TTAATTCTT	GGTAGCTAGA	AATTTAGAGT	AGTTGAAATC	300
TTTAGGAATG	AACTTCTGAG	GGCCAAAAAA	TGTGACTGAC	ACACTCGAG		349

(2) INFORMATION FOR SEQ ID NO:201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

GAATTCGGCC	TTCATGGCCT	ACATCACCAA	TTCGGCTGGG	TAAGGGTCCC	CATGAAGGCG	60
CAGCCGGGTA	TAGAGGTGCA	GGGGAGAGCA	GCCTGGGGAG	TCCCTATCTG	GATAGGCTCC	120
AGCCTGGGTC	GGGGCCGTCC	TGGTGCCCGG	TGAAGCGTCA	AAAGAGGGAG	CCTGAGCCGG	180
GCAACGCAGA	AGGGTGGAGA	GGAGGGGGTG	GCGAGGGCGG	GCAGCGAGGC	CTGGAGCCGC	240
CAGGAGAGGG	GCGGGGGGCG	GCCCTTCTCC	AGGAATTTC	GGGGATCGTG	TTACAGCGTT	300
GGCGGAGCCC	GAGCGGAGTG	GGACTCGAG				329

(2) INFORMATION FOR SEQ ID NO:202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

GAATTCGGCC	TTCATGGCCT	AGAAAGGGGA	GGGAACGTGA	CAGGCAGGTG	TGGGATAGGG	60
ACTTCTCTTC	CGGTCAGAGC	AAGGGTCGTC	CGAAACCAAA	ACAACCTCT	TCCCTTCATC	120
TCGCCCCGGA	TCCAAAGTCT	TGGGGCTAGG	CTGGGGCGGG	AGTGGCACGG	AGATGTAGGA	180
ACACTGCCTT	TCGTTACTTC	TCCTGCCATG	GCTGACCTTT	TTGTCTCTTG	TTTCATGGTT	240
TTACACGTAT	GAATGGCTTG	AGACTGAGGA	TTTAGGGAAG	AAGCGAAGGC	ATCATCTAGG	300
GCTGTGCTGT	GCCAAGTTGA	GCAGTTGTTT	AACTGTTAG	AATTTTTGAC	TGGTGTAATA	360
ACCCTCTATG	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

GAATTCGGCC	TTCAAGGCCT	ACGTGAAACC	CCATCGGCTT	CATTGGCTCC	TTGATTAAAA	60
------------	------------	------------	------------	------------	------------	----

```

CCACGCCCGG CTNTCTGCCC TCTTTGATGC TGCTGGGCCA GGTGCCCCAG CCATATCCCA 120
GCCCCGTCTG CAGGAGACCG GAGGCNGCTG CTGCTGCTAT TGTGTGGATG CCGCGCGTGT 180
CTTCTCTTCT TTCCAGAGAT GGCTAACAGG GGCCCCGAGCT ATGGCTTAAG CCGAGAGGTG 240
CAGGAGAAGA TCGAGCAGAA GATCTCGAG 269

```

(2) INFORMATION FOR SEQ ID NO:204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 197 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

```

GAATTCGGCC TTCATGGCCT AGATGTGTTG AACCTTATTC TTGTACATTC ATTCAATCAA 60
GGCAAACCTT TATAATTTT CTTTGTTC CAATGACCTT GAAATGTTAT AGCATGGTAA 120
TATTCTATGC AACTATAGTT ATACTTTTGT GTTTGACACT GTATTTTTC ACATTGATT 180
ACTGGTTGAG GCTCGAG 197

```

(2) INFORMATION FOR SEQ ID NO:205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

```

GAATTCGGCC TTCATGGCCT AGCAAGACCT TTAAAGTATA TACTCTGAAA GTGTGGCTAA 60
TATGATCATG ATGCTGTAGG AAAAAAGGT TATATGTCCA AGTGTATGTA CTTGTAAATG 120
TGCCTAAAGA AACCTGGAAG GATACACAGG TCTTCCCTGG GGTACAAGAC GGAGAACTGG 180
GATCATCATC TTAAGTCTAC TCTTCCTTTT TACTCTTCTG TCCTCTTAGA GACTTTTGCC 240
TGTATACATG GATTACTGTT ACTTAGCAGG GCGGACCGGT TGGCCAAAGC CTTGGTGTGC 300
CCTTGGCACA ATTCTGCCAA GACCCTTACC CTCTCCTCTC CTCANGGCTC CCTTAACCCC 360
TCTCCCCACA TCTGGAAGAC CCTGGATACA TTTTCT 396

```

(2) INFORMATION FOR SEQ ID NO:206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

```

GAATTCGGCC TTCATGGCCT AGGAAGAGGT TGAGAAGACT CCTGGGCTTC AGCCTCTCCC 60
ACCCAGCCCT GCCCTCACC TGCCTGCCCT CCCCTCCCC ACTCTATACT AGGGACTGGA 120
TCTCAGCCTC TGATCAGTTT CACAAAGTTT GTTCCCTAAG GAAATCAAAT CCCATTGTCA 180
CCTAACTCTG AAGATCTAAA TAGCCCTTGG ATCAGTACGG GAACCCCAA TCCACAGGG 240
CCAGATGTGG AGTCTGTGTC TGCCCCGTC TTCTCTCCAT CCTCAAAGCC CCCACTTCTC 300

```

TCCAGGCTGC TTCTCGAG

318

(2) INFORMATION FOR SEQ ID NO:207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

GAATTCTAGA TCCTGCCCTC GGAACAATGG GACTCGGCGC GCGAGGTGCT TGGGCCGCGC	60
TGCTCCTGGG GACGCTGCAG GTGCTAGCGC TGCTGGGGGC CGCCCATGAA AGCGCAGCCA	120
TGGCGGCATC TGCAAACATA GAGAATTCTG GGCTTCCACA CAACTCCAGT GCTAACTCAA	180
CAGAGACTCT CCAACATGTG CCTTCTGACC ATACAAATGA AACTTCCAAC AGTACTGTGA	240
AACCACCAAC TTCAGTTGCC TCAGACTCCA GTAATACAAC GGTCACCACC CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

GAATTCGGCC TTCATGGCCT AGTCTCTTGA AAAGCCGCAT TTCCAGGCGC TTGGCCAGTG	60
GCCTGGGAAG TAGCCTGTGC TTGTATTGAG ACAGTCCCCC AGCAGCAAAC CATGTTCCAG	120
TCATTCCCTT TCCTACTTTG GGGATTGTTG CCTTTTCTGC TTGTTTAAAG TAAAACAAGC	180
ATGTACTTGT TTGTATGTAT GTATGTATGT AGTTGTACGG TGGGCACAAA TAAAAGAGG	240
GCTGTATCCA AATAAATCAT TTCTGGCTGC TCACTGGCAC AGTCCCTTTG CTCCGTCCCC	300
TCCTGGCTCG AG	312

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

GAATTCGGCC TTCATGGCCT AGGCAGCGTT TCACCGCTGT GGAGGACCAG TATTACTGCG	60
TGGATTGCTA CAAGAACTTT GTGGCCAAGA AGTGTGCTGG ATGCAAGAAC CCCATCACTG	120
GGAAAAGGAC TGTGTCAAGA GTGAGCCACC CAGTCTCTAA AGCTAGGAAG CCCCAGTGT	180
GCCACGGGAA ACGCTTGCCT CTCACCTGT TTCCAGCGC CAACCTCCGG GGCAGGCATC	240
CGGGTGGAGA GAGGACTTGT CCCTCGTGGG TGGTGGTTCT TTATAGAAAA AATCGAAGCT	300
TAGCAGCTCC TCGAG	315

(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```

GAATTCGGCC AAAGAGGCCT AGGAAGATGG CGAAGGTCTC AGAGCTTTAC GATGTCACCT      60
GGGAAGAAAT GAGAGATAAA ATGAGAAAAT GGAGAGAAGA AAACCTCAAGA AATAGTGAGC      120
AAATTGTGGA AGTTGGAGAA GAATTAATTA ATGAATATGC TTCTAAGCTG GGAGATGATA      180
TTTGATCAT ATATGAACAG GTGATGATTG CAGCACTAGA CTATGGTCGG GATGACTTGG      240
CATTGTTTTG TCTTCAAGAG CTGAGAAGAC AGTTCCTTGG CAGTCACAGA GTCAAGCGAT      300
TAACAGGCAT GAGATTTGAA GCCATGGAAA GATATGATGA TGCTATACAG CTATATGATA      360
GGATTTTACA AGAAGATCCA ACTAACACTG CTGCAAGAAA GCGTAAGATT GCCATTGCAA      420
AAGCCAGGG GAAAAATGTG GAGGCCATTG GGGAGCTGAA TGAGTATCTG GAACAATTG      480
TTGGAGACCA AGAAGCCTGG CATGAACCTG CACTCGAG      518

```

(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTT CATTTCCTTT GTAGACTAAT GTTACAATAA      60
ATAAATGGGA ATTTTAAATA CCTGCATGTT CTGTTTTTCT CTTTTTCTT TTTTCAGCCA      120
TAATGAAAGG AAAGTGACCT GCAAACATCC AGTCACAGGA CAACCATCAC AGGACAATTG      180
TATTTTGTGTA GTGAATGAAC AGACTGTTGC AACCATGACA TCTGAAGAAA AGAAGGAACG      240
GCCAATAAGT ATGATAAATG AAGCTTCTAA CTATAACGTG ACTTCAGATT ATGCAGTGCA      300
TCCAATGAGC CCTGTAGGCA GAACTTCACG AGCTTCAAAA AAAGTTCATA ATTTTGAAAA      360
GAGGTCAAAT TCAATTAAAA GGAATCCTAA TGCACCGGGC GATCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

```

GAATTCGGCC AAAGAGGCCT AGTACAGTCC CAATCAAGAA GCCTTATTAA CCTTCTGTGT      60
GAGGGACTAG ACTCAGTGTT GGGTTTGGAG GATCCACTGG TGAGGAGCAT TCAGTCTAGC      120
AGGAGAAATG TCAGCATTAT TTATTACACA ACAAGATCTG ATGCATTGAG ATGTACTTAC      180
AGGTCTAGGA ACTGTTGAGA GGAGCACAAA TGAATGAGAG AGAGAGGGAG AGAGGGAGAT      240
TGAGTGAGTT AGAGAGTTGT TGGTGCTCCA CAAGGAGCAG TAAAGTATTT TAAAAATAAA      300
AAATAATAAG GCTGACTCTG TGTCTGCTGCT AGGGGTTGGC CATGCTCCAC AAAAAGCAGT      360
AAAGTGTTTT TTGTTTTGTT TCGTTTTTTT TTAAAGACA GACGTCTCGA G      411

```

(2) INFORMATION FOR SEQ ID NO:213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

```

GAATTCNGCC AAAGAGGCCT AGTTNATCT TCTTACCTAT TTACTGAATG CNACATTACT      60
GCACACCAAG ACAAAGAGC TCTCCAGGAA AACATTGGAT ATATTGAGAG CATTAAAAGA      120
TACTGCAAAA GCTCTAATAA ATTCAGTCTG CTTATTTTCC AAATTCATA AACTACATAC      180
TTAGGAAACT GTGCTTCAG TGAGCTAAAC TTCTTTTTTT AAGTAACTAT CATAGTTTAA      240
AGAAAAACAT TTTAAGAAGA CAAAAGTAT TTATTAAGCC CATCTAAAAG GCTAATGCAA      300
ATTCCCAAAA AAGGAGCACA TAGAGATAGG CATCTCGAG                               339

```

(2) INFORMATION FOR SEQ ID NO:214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

```

GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCCT CGAGACACTA GCCCTTTTTT      60
CTGTTGGTTT AGCACAAATA CTTCCCTCCT CCGGCACCTC CAAACCTACC CCACAGTCAG      120
TGTACTTGTT TTATATATAT TTAATCTTAT TCAATGGAAA CCATGCTTTT GTCGTTTTAT      180
ACTTTGCTAG GTAGACTTCT CGAG                               204

```

(2) INFORMATION FOR SEQ ID NO:215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

```

CTCGAGAGGC GCATCTTCAC TGGCATATGA CAGGCTGTCA CTGCAGCTAA TGTTGGTACA      60
GTTTTTCCTA AGACCTACTG ATGCATCTAC CGTATTGGAA ACCAACCAGA CATTGGCAAT      120
GGTGCTAACA AATAGCATAA TAACAGTAGC GATGTGGACC ACAAAGATAC CAGCCAGCAA      180
TACCAACATG TTGGCTCTTT TTTTTTGGT AACTTGTGAG CAAAGAGAGT TCTGAAGGGT      240
CCCAGCGACA GAGGCACTCG AGGCAGTCT AGAATTCAAT TAGGCCTCTT TGGCCGAATT      300
C                               301

```

(2) INFORMATION FOR SEQ ID NO:216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

```
GAATTCGGCC AAAGAGGCCT AAAATATTTG AGTCTAACT TATAAATTTT GCATTCTCCC      60
TAACGAAAAA ATTTCTATTA CTGTGGTGGA TTTCTTTAAA TTTTGAATAT AGTTACTGAA      120
ATATTAATTC TTTCAATTAA ATTTATATTT ACTCACTGGT TCCTTCCCCT TCTTTAAGGA      180
GACAGAAAAC ATTAACACTT TTTAACCTCT CATTTGTTTA AAAATTTATT GACCTCTCCT      240
CTGAGACAGT TTGTATTCCT AGATCTCTTT AAACATAAAT ATGCTTATTT TCAAGTTTTT      300
GTCACAGTAT TCACTCGAG                                     319
```

(2) INFORMATION FOR SEQ ID NO:217:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 278 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

```
GAATTCGGCC AAGAGGCCT ATTTAGATTT AACCCAGTTT GTAGACATTT GCATAGATCA      60
AGCAAACTA GAAGAGTTTG AAGAGAAAGC ATCAGAAGCTT TACAAGAAAT TTGAAAAGA      120
GTTTACCGAC CACCAAGAAA CTCAGGCTGA ATTGCAGAAA AAAGAGGCAA AGATTAATGA      180
GCTTCAAGCA GAGCTACAAG CTTTAAAGTC TCAGTTTGGT GCCTTGCCAG CTGATTGTAA      240
TATTCCTTTG CCTCCCTCTA AAGAAGGTGG AACTCGAG                                     278
```

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 298 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

```
GAATTCGGCC AAAGAGGCCT ACCTGGCTCA TTTATAACCT CCTCGATCCT ATTACTGATT      60
TGCATTCTTA ACTACAGGTA AGAGAAAACC AGTGCAACCT AGCTTTCAAT AGACAGGAAT      120
TTGCTGGCTC ATATAAATGA GACATCCAAT AAAGAAGAAA AGTTGGAAAA AATGTGTCAA      180
ATGTAGCATC CTCTCTCTCT CTTTCTCTCT CTCTCTGTTT TTTCACCTAG GCTTGTGCCA      240
TAAACCTGCT TCTACATCAG TTAGTGTTG TATGGGCGTC TTGTTGGCTG AGCTCGAG      298
```

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

```

GAATTCGGCC AAAGAGGCCT ACTTAGCAGA ATATATTCTT TAATAGCTCC CATAAAGCAA      60
ACAAACCCAA AATATATTCT CCTGACCCTA CATTCACTTC CAACTATCAC CCTACATCTA      120
CATTCTCCTT TTCATACCAA ACTTTTTCCT AGCAGTTGTC TATATTTATG TCTCCACTTC      180
TTTACCTCCT ATTCTTGCTT CAGTATGCTT CAGTTGAGCT TCGTCCCCCT GTAGTCCACC      240
ACCAACTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

```

GAATTCGGCC AAAGAGGCCT AGATTGATTC TGTGTTGTGG TATTGGCCCT TACATACAAC      60
TGGAGGAAGT GTGAATTTCA TCATGTTGAT AAATTGGACT GTCATGATTC TTTATAATTA      120
CTTCAATGCC ATGTTTGTCT GTCGGGGCTT TGTCCCTCTG GGGTGGAAAC CGATGTGTGA      180
TGAAGATGGA CCATCACTGT CCTTGATCA ACAACTGTTG TGGTTACCAA AATCATGCTT      240
CGTTCACACT GTTCTCCTT TTAGCACCAC TGGGTTGTAT CCATGCTGCT TTCATTTTGT      300
TGATGACTAT GTACACACAG CTTATCATC GGCTCTCCTT TGGGTGGAAC ACAGTGAAGA      360
TCGACATGAG TGCAGCACCC TCGAG                                     385

```

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

```

GAATTCGGCC AAAGAGGCNT ACCCNGATTA TAGTTTTTGT ATTGTTTTTA CAATTTTTGT      60
GAATTAGGAT CCAAATAAGG TCTGTAAATA TTACATTGGG TTTAGGTAAT CGATACTTTT      120
TTTCTTTTAA TCTATAAGTT TTCCTCTATC TTTTATTGT GGTATTCCC ATACAATTGG      180
TTTGTGAAG AAGCCAGGTC TTGCCCCTAT AATACTTCTC AGAATCTAGA TTGTGTTGAT      240
GAGATCCCAG TGGTTTCATG TAATATGTTT TTTGTCCCT TGTATTTTCT GTAAATTTTG      300
TTTATTTTAT TTTTTTTTAT TCTATTATTT GAGATGGAGT CTTGCACTGT CACCCAGGCT      360
AGAGTACAGT GGCATGATCT CAACTCACCG CAACCTCGAG                                     400

```

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

```

GAATTCGGCC AAAGAGGCCT AAGAGCCTAT AAGGTTTACA TATTTCACTG GAGAGAGAAA      60
TAGGGACATA CAATAAATGA TTTTATAATA AATTTCCATG AAAAGTGAAT CTGAAAACCC      120
CACCGGAAGG CAGAGTAGTG CAGCCAAAGG AGCATGAATT GTGGAATCAT ACAGCTCTAG      180
GTTCAGATCC TACCTTTACC ACTTGATAGC TAGGCAGACT TCAACAAGTT AGTCTAATTT      240
GAGCTTCAGT TCTCTCATCT GTGAAAAAGA GAAAATACAG CCACTTTATA ACATTATTTT      300
AGATGCCATA AGGTAGGTAA AGTGCCAGAC ACATAGATTC AAAAAATCTCA ATAAATAGG      360
AAGGCTGGAA TTTCCAAAAT TTTTCTTGC TTTCACAATC TGGGTTCTAA ATTTATTATT      420
ACTCTACCCA TCACTTCCTC CTTCTCCCTC CACAACCTCA CTATAAGCCC AACATCTCGA      480
G                                                                                   481

```

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

```

GAATTCGGCC AAAGAGGCCT AGTGTCATGT AGAGGTCTCA GCATTTCTCT TAGTATTTGA      60
CTGTATTAGT TTTACATATT TCTTCTTTTG TTTAGAGTAT AACCCTTCT TACATTTCTT      120
TCAGTCGTTT TCTAAGAAG AAATTAATCT TTTTAGAAAT CCTGGCAGTT ACCCCGCAAT      180
TGATGTTTTG GTGAAAAATT AGAGCACACC AGTTTGTCT AACTTTAAGA AACATTTTCA      240
CTTTATTGAT ATTCTGAGGA TTTTAGTGAT TTGGGTAATT TGGGTCTAAT AAAGAGTAAA      300
TTGTGAATA CTCATTTGTT TTGAGTCATC TATATTTTAA AACCCTTCT TTAGTTGTTT      360
TTTCATCCCT AATACAAATG CAACTTCCC ACTTGCTCGA G                                                                                   401

```

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

```

GAATTCGGCC AAAGAGGCCT AACTGATGT CTTCCATTG CTGGATAGGA CATGCTGACT      60
GATGACCTCA CAGACTGTTT TTATGCCCTC ACTACTCACC TCACCACCTA CAGTCATAGG      120
CTGACTAGGA GTTGGTTGTG TACATTCTTA AACCTTTTGG CCCTCTTTAT TTGTCTTTCT      180
AAGTGTGTAT TCAGTACTAT GTAAATTGAT AAAACATGAG TGTGAAAATA TTTTTTTTTG      240
CTATAAAAAT GTAAATTGAA TTCTTTGGGG AAGAGCTGAT AAAATATGTC ACTTAAAGAT      300
CTTGTTAAAT TAGATGAGGG AGATATAGAT GACAGAACT CTTTCAACAA ATATCTAAAA      360
AGATGTGCCA CTCCAATTAT TTTGTGAGTG TCTTCAAGTT TTTGTCCAC TTTAAAGAAA      420
ACCAAAGTGG CCATCATAGC CAATGAATTA TGCAGGAGTC TCGAG                                                                                   465

```

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

GAATTCGGCC	AAAGAGGCCT	ACACATTATA	TTAGATTTC	TAGAACTGT	TGGAAATATC	60
TAGCACATGT	GCTTTATCCC	ACAATAATTA	CATAGAAAAT	TAAAAAGAAT	TAATTCTAAT	120
GTAACCATCT	TTTTACTTGA	CTTTTTTTTT	TTTTGCTCTG	CTCACAGGTC	TAATTGTTGT	180
TATTCTCACT	TTATTTTCT	ATAAGGTAGG	AATAATATCC	ACTTCATTAG	CTCATCATGA	240
GGGATAAGTA	GGATTGGAAA	AGATACTTTC	AAAGGGCACC	TAAGTGTGAA	GAAGATGCCT	300
TCATTGTCAT	TTCTTTCTTG	GCACATTTCT	TGTTATCCAG	TCATTCATTA	GGACTCCATG	360
TTTATTGAAC	ACCTACTCTG	TGCCAGGCAC	TTTTCTCTGT	TCTGGAAATA	TCACCATGTA	420
AAAACAAATA	GCTGAAGAAT	GCCCTGCCCT	CATAGAGCTT	ACAGACATAG	AGCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

GAATTCGGCC	AAAGAGGCCT	AGCGTTTCTG	ACTTTATTAC	TGGTAATTTA	TTGCACAGGT	60
TTTTCTGTCAT	CAAAAAAGTA	TCTGCTAAAA	TAGAGAAAGT	TGTGTCTGAA	TTACATTTTC	120
CCCCCAACTT	CTAAAAATAT	TTCCCCTAAA	AAAGAATCCA	CTCATCTAAT	TTTAAAGAAA	180
ATATACTTCT	TACACAAGAC	AATCCAAACT	GATGCAAAAT	ATTTATTCCA	AGTTAGTTAT	240
TTTATGCAGT	AGTTTCCCCC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

GAATTCGGCC	AAAGACAGAA	ATTTTAATCT	TGAAAGACTT	TTCAGGGTAT	CTCATTTTTT	60
AGGTGGGGGT	GGCAGGTGTA	TTTCTTTTTT	AACAAATAAA	AGGCATTTAA	GTAAACTTAA	120
AATGAAAAAA	GTAGGCCTTC	TGACATTGTG	TACTTGGTGG	TTCTGTCCCT	CTGCCTGTAA	180
CAAATCTCAT	TTTTGTTACC	AAGAACTGTA	TGAAAGAAGT	AAATCCACCC	CTCTCGAG	238

(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

```

GAATTCGGCC AAAGAGGCCT ATGCCTGTGT TGGGTTGACA GTGAGGGTAA TAATGACTTG      60
TTGGTTGATT GTAGATATTG GGCTGTTAAT TGGTGTGTA GAATATTGA GCACAGGTGG      120
AGTAGAAACA AATCACAAG ACTTTAAGGA GTTGAGGTAT AATGAAACTC TCACAACTT      180
CAGCTGTCAT GGAAGAATG GAACCACCAA TGAAGGATC ACTCATGGTT TCAAGTTACA      240
GAGTGCCTAT GAGAGTGGCC TGATGCCTTA CACGAATTAC ACATTTGATT TCAAGGGTAT      300
AATAGACTAC ATTTTCTATT CTAAACCTCA GCTGAACACC TTAGGCATCC TGGGCCCTCT      360
GGACCACCAC TGGCTGGTTG AGAATAACAT CAGTGGCTGC CCGCACCCCTC TCATCCCCTC      420
TGACCACTTC TCACTTTTTG CACAACCTGA GCTCTTACTG CCTTCTCTGC CCCAAGTCAA      480
CGGCATTCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

```

GAATTCGGCC AAAGAGGCCT AAGAAATCAA AATTAAAGCA ATCAAATAAT ACTCACATTT      60
ATATAAGAAA TACTTCAATT TACTTTCCAA TGAGTAAAGT TTTATATTTA ATGTTTTAAT      120
ATTTTCATATT TTAGTTTCTT GCAATTATTT ACTTTTCTA AAACCTACTT AAATTAGGTT      180
TAAAAGTCTA CTATATATAA TTTGAAATTT TATTCAGTTT GCCTACAGGT GTGTTTTAAC      240
CACTGTGTAC ATAGTATTTA ACGGTCTGCT TTTTTTTTT TAATATGTT TCATGNTGA      300
ACATCTGTAT GTTCATACTT TTCTTGACAA AGTTCTAAAG GTTACTGTGT TGAAGCATAAC      360
TGAACGATTA CTGATAATTT CTATTTTGAG GAACAGGTAT GTCAGTTCTT TCTCTCTGTT      420
TGATAATTCT CTCTTTTCCC CTTAGGAATC CAAAAATCCT TGTGGAGTGT CTTACTCCTG      480
ATTTTCGAGG TGATCTCAA GCAATAGAAA AAGTTGCTCT GTCAGGATTA GATGTGTATG      540
CACATAATGT AGAACAGTC CCATTGCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 193 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```

GAATTCGGCC TTCATGGCCT ATCGAGATAC GCTTTCGCGC ACCAGGTACG CCTGGTGTTT      60
CTTTGTGGTT TTTCGGATTC TTTTGGGGA GTGCGGGGAG TCACAGTTAG AAGGCGGCCG      120
GGTGTGCTG GAGGAAAGTG CTGAGGTCCA GAGCGTAGTC CGAGGGCTCC GAAGTCAGAT      180
TAAAGGGCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```

GAATTCGGCC TTCATGGCCT ACATAATGAT GCTGCCTCAA AACTCGTGGC ATATTGATTT      60
TGGAAGATGC TGCTGTCATC AGAACCTTTT CTCTGCTGTG GTAACCTGCA TCCTGCTCCT      120
GAATTCCTGC TTTCTCATCA GCAGTTTAA TGGACAGAT TTGGAGTTGA GGCTGGTCAA      180
TGGAGACGGT CCCTGCTCTG GGACAGTGGA GGTGAAATTC CAGGGACAGT GGGGGACTGT      240
GTGTGATGAT GGGTGGAACA CTAAGCCTC AACTGTCGTG TGCAAACAGC TTGGATGTCC      300
ATTTTTCTTT CGCCATGTTT CGTTTTGGAC AAGCCGTGAC TAGACATGGA AAAATTTGGC      360
TTGATGATGT TTCTGTTAT GGAAATGAGT CAGCTCTCTG GGAATGTCAA CACCGGGAAT      420
GGGGAAGCCA TAACTGTTAT CATGGAGAAG ATGTTGGTGT GAACTGTTAT GGTGAAGCCA      480
ATCTGGGTTT GAGGCTAGTG GATGGAAACA ACTCCTGTTT AGGGAGAGTG GAGGTGAAAT      540
TCCAAGAAAG GTGGGGGACT ATATGTGATG ATGGGTGGAA CTTGAATACT GCTGCCGTTA      600
TACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

```

GAATTCGGCC TTCATCGCCT ACAGCGCTGC CTTTCCTTAT GAAGAAGACA CAAACTTGGA      60
TTCTCACTTG CATTATCTT CAGCTGCTCC TATTTAATCC TTTCGTCAAA ACTGAAGGGA      120
TCTGCAGGAA TCGTGTGACT AATAATGTAA AAGACGTCAC TAAATTGGTG GCAAATCTTC      180
CAAAAGACTA CATGATAACC CTCAAATATG TCCCCGGGAT GGATGTTTTG CCAAGTCATT      240
GTTGGATAAG CGAGATGGTA GTACAATTGT CAGACAGCTT GACTGATCTT CTGGACAAGT      300
TTTCAAATAT TTCTGAAGGC TTGAGTAATT ATTCCATCAT AGACAACTT GTGAATATAG      360
TGGATGACCT TGTGGAGTGC GTGAAAGAAA ACTCATCTAA GGATCTAAAA AAATCATTCA      420
AGAGCCCAGA ACCCAGGCTC TTTACTCCTG AAGAATTCTT TAGAATTTT AATAGATCCA      480
TTGATGCCTT CAAGGACTTT GTAGTGGCAA ATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

```

GAATTCGGCC TTCATGGCCT ACCTTGATAC ATCAGCTGAC CTCATTTCG GATACCTTTT      60
CCCCCCCCGAA AAGTACAACA TCTGGGCCGC CCCAGCCCGA AGACAGATCG TCGCTCCCTG      120
GACAATCAGA CGAATTCTCC CCCCCCCC GC AAAAAAAG CCATCCCCC GCTCTGCCCC      180
GTCGCACATT CGGCCCCCGC GACTCGGCCA GAGCGGCGCT GGCAAGAGGAG TGTCCGGCAG      240
GAGGGCCAAC GCCCGCTGTT CGGTTTGGCA CACGCAGCAG GGAGGTGGGC GGCAGCGTCG      300
CCGGCTTCCA GACACCAATG GGAATCCCAA TGGGAAGTC GATGCTGGTG CTTCTCACCT      360
TCTTGGCCTT CGCTCGTGC TGCATTGCTG CTTACCGCCC CAGTGAGACC CTGTGCTCTG      420
AG

```

(2) INFORMATION FOR SEQ ID NO:234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

```

GAATTCGGCC TTCATGGCCT AAGAGATTAA GTGATTTACT CAAGGCATA TTCCTTGGA 60
GTAGCAAAAC TTCTGGACCA GATTCTGTAT TCCAAAGGCG GTACTGCTTG TACAACACTC 120
TGAGAAGTAA TTACTGTGGA GCAAAGCAAA AAGAACTCTA AAAGCAGGTG ATAGGTGTAG 180
ATTTAGATAG TGTAAGGGTA GGCTAAAGTG TTGTAACAAA TGCACCCTCA AGTAGGTAAT 240
GGCTCAAACA CAATAGATGT TCACTTCCCA CATCTCAGAG CAAATTGGGT TCTCCTCATC 300
AGCTAAAGCT TTCCTACATG GGATGATTTG GGGAGCAAGA CACTCCATCT ATGGCTCCCT 360
TACCCTCCAA GGCCTTCTTA TTGTCTTTAT GTAACCAGTG GAAGAGCTCG AG 412

```

(2) INFORMATION FOR SEQ ID NO:235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

```

GAATTCGCCT TCATGGCCTA GGCTTCTTCG GAGCTGTGTA NTCTTAATTT GCTTTGCTGC 60
TGGCTGGCTG ACAGCTGATG GGGGACTCCT CANGACGGAC TCCCTTCCAG ATGCACCCAT 120
CTCCATCCTT CTCAACTCCC CAACCTTTGT CCTCCCCACT CTTCGCTCGC GCGGCGGTCT 180
GAGACCACCA GGACCAGTTT CAGGGGTTTC CTCTCCAGC GAGACTTGGC AGAACAGGCT 240
TTAAAGCAA AGGAGGCAGC GGAAGACTGT GAATTCCTTT GGACAATTGA TGATATTTAT 300
CATTGTGCCC AGTTTCTACA AATAAAAGAT GGGTGGATTA TTTTCTCGAT GGAGGACAAA 360
ACCTTCAACT GTAGAAGTTC TAGAAAGTAT AGATAAGGAA ATTCAAGCAT TGGAAGAATT 420
TAGGGAAAAA AATCAGAGAT TACAAAAATT ATGGGTTGGA AGATTAATTC TGTATTCCTC 480
AGTTCTCTAT CTGTTAACAT GCTTAATTGT ATATTGTGG TATCTTCCTG ATGAATTTAC 540
AGCAAGACTT GCCATGACAC TCCCACATCT CGAG 574

```

(2) INFORMATION FOR SEQ ID NO:236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

```

GAATTCGGCC TTCATGGCCT AGGCGCGGCC CGGGTTCCCG TTCCCCGCGG AGCCATGCGG 60
TACAACGAGA AGGAGCTGCA GGCTCTGTCC CGGCAGCCGG CCGAGATGGC GGCCGAGCTG 120
GGCATGAGGG GCCCAAGAA GGCAGCGTG CTGAAGCGGC GGCTGGTGAA GCTGGTGGTG 180
AATTTCTCTT TCTACTTTTC GACAGACGAG GCCGAGCCCG TCGGAGCCCT GCTGCTGGAG 240

```

CGCTGCAGAG TCGTCCGGGA AGAGCCCGGC ACCTTCTCCA TCAGCTTCAT TGAGGACCCCT 300
GAGAGGAAGT ATCACTTCGA GTTCAGCTCG AG 332

(2) INFORMATION FOR SEQ ID NO:237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

GAATTCGGCC TTCATGGCCT AATTGCAAGA TCACGGAATC TCCTGAATCA TTAAGAAAAG 60
ATAAAATATC ACAAGCATCT TTAGTGTTAT GTGTATTCAG TAATTCTTTG GAGTTGTATT 120
TATTAAGCTT ACCAGATTTT AAAGGCATAT AAAATGTGGT AAGATATGAG ACACATACTG 180
AAATATCAGT GCAAAGGGAG AATGGTAGTT GAATGGTCAG AAACGAAAAA GCCTCGAG 238

(2) INFORMATION FOR SEQ ID NO:238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

GAATTCGGCC TTCATGGCCT AGAAGCATTT TTTGTTATTG TGAAACATTT TTATACTTTC 60
ATTATAATTT GTTGAGCCTA GAGTTGGGCT ATTTGAATAT TTATTATGAT AATCTTTTGG 120
CTAATGGTAA CAGCATATCT TGTTCTAACA AAATTACTGT TAACAGCAAT CGAACTCGAG 180

(2) INFORMATION FOR SEQ ID NO:239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 578 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

GAATTCGGCC TTCATGGCCT ACTGAGATCC AGACCAGCTC CTCCCAGACC TCTCCAGAAG 60
AAGCCATGGG AACCCCTCGT ATCCAGCATT TGCTGATCCT CCTGGTCCTA GGAGCCTCCC 120
TCCTGACCTC GGGCCTAGAG CTGTTTTGTC AAAAGGGTCT GTCCATGACT GTGGAAGCAG 180
ATCCAGCCAA TATGTTTAAAC TGGACCACAG AGGAAGTGGA GACTTGTGAC AAAGGGGCAC 240
TTTGCCAGGA AACCATACTA ATAATTAAAG CAGGGACTGA GACAGCCATT TTGGCCACGA 300
AGGGCTGCAAT CCCGGAAGGG GAGGAGGCCA TAACAATTGT CCAGCACTCT TCACCTCCCG 360
GCCTGATCGT GACCTCCTAC AGTAACTACT GTGAGGATTC CTTCTGTAAT GACAAAGACA 420
GCCTGTCTCA GTTTTGGGAG TTCAGTGAGA CCACAGCTTC CACTGTGTCA ACAACCTCC 480
ATTGTCCAAC CTGTGTGGCT TTGGGGACCT GTTTCAGTGC TCCTTCTCTT CCCTGTCCCA 540
ATGGTACAAC TCGATGCTAT CAAGGAAAC CTCTCGAG 578

(2) INFORMATION FOR SEQ ID NO:240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

```

GAATTCGGCC TTCATGGCCT ACATGAATCC ACTCCTGATC CTTACCTTTG TGGCAGCTGC      60
TCTTGCTGCC CCCTTTGATG ATGATGACAA GATCGTTGGG GGCTACAAC GTGAGGAGAA      120
TTCTGTCCCC TACCAGGTGT CCTGAATTC TGGCTACCAC TTCTGTGGTG GCTCCCTCAT      180
CAACGAACAG TGGGTGGTAT CAGCAGGCCA CTGCTACAAG TCCCGCATCC AGGTGAGACT      240
GGGAGAGCAC AACATCGAAG TCCTGGAGGG GAATGAGCAG TTCATCAATG CAGCCAAGAT      300
CATCCGCCAC CCCCAATCG ACAGGAGACT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

```

GAATTCGGCC TTCATGGCCT AGGGCACCAC TGAGTTCAGT ACTTCAAAT TGCCGTGCTC      60
TACCTCTCCC CAGTGACAAA AAACACTCTC CACACCAAGC TGCTGCTGCT GGGGGATGGA      120
GGGATGGCGT CAGCGATTCA AGACTGTTTT TCCTACCTGT TCAGCACTTC TTTCAGCGAT      180
ATGAAGTTAA ATCCAGTCTT TCCTGTCTC CAGGCATCAT CGCCATCAAC ATACAGCCAT      240
ACTCCAGGAT TGCCCATCTT CAACATAAAC GGACTCTCCT GGACTCCACT TCCCACATCA      300
GTCACAGCCA CACTTCCTGA GAAAGAAGTC TACACTCTTC ATTCACTTTC ATTCACCCAC      360
TGCTCGAG                                     368

```

(2) INFORMATION FOR SEQ ID NO:242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

```

GAATTCGGCC TTCATGGCCT AGAGAAAATA AAGAGTTATA TCAGAAATTT ACAACATAA      60
CTTTTAAAT TTAAATTGC AAAATATATA TCATACGAAA ATGAAAATTA TAATTCTTCT      120
TGGATTCTTG GGAGCCACAT TGTCAGCCCC ACTTATCCCA CAGCGTCTCA TGTCTGCCAG      180
CAATAGCAAT GAGTTACTTC TTAATCTTAA TAATGGTCAA CTTTGTCCAC TACAATTCA      240
GGGCCCCACTT AATTCATGGA TTCCACCTTT CTCTGGAATT TTACAACAGC AGCAGCAGGC      300
TCAAATCCA GGACTCTCCC AGTTCTCTTT ATCAGCTCTA GACCAGTTTG CTGGACTGCT      360
CCCAAATCAG ATACCCTTAA CAGGAGAGGC CAGTTTGGCC CAAGGAGCCC AGGCAGGCCA      420
AGTTGATCCC TTACAGCTTC AAACACCGCC TCAGACACAA CCAGGCCAC GTCTCGAG      478

```


(2) INFORMATION FOR SEQ ID NO:243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

```
GAATTCGGCC TTCATGGCCT ACTTACAGAA CCTATTCCT GGAAGGAAG CCCTCATTAT      60
AATGATTTTC ATTCTTATGT GTGTTTCAGG ACGACTGGGT TTGGATTCAG AAGAGGATTA      120
TTATACACCA CAAAAGGTGG ATGTTCCCAA GGCCTTGATT ATTGTTGCAG TTCAATGTGG      180
CTGTGATGGG ACATTTCTGT TGACCCAGTC AGGCAAAGTG CTGGCCTGTG GACTCAATGA      240
ATTCAATAAG CTGGGTCTGA ATCAGTGCAT GTCGGGAATT ATCAACCATG AAGCATACCA      300
TGAAGTTCCC TACACAACGT CCTTTACCTT GGCCAAACAG TTGTCCTTTT ATAAGATCCG      360
TACCATTGCC CCAGGCAAGA CTCACACAGC TGCTATTGAT GAGCGAGGCC GGCTGCTGAC      420
CTTTGGCTGC AACAAGTGTG GGCAGCTGGG CGTTGGGAAC TACAAGAAGC GTCTGGGAAT      480
CAACCTCGAG                                         490
```

(2) INFORMATION FOR SEQ ID NO:244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

```
GAATTCGGCC TTCATGGCCT AGAAAAAAGA AACTGTCGTG GATACTGTCA GTGTATATAT      60
TTATGTGGTA CCTGAGAGCC ACCCCAAATT AGATTGACTT TAGATCGTTT ATACAAAAAT      120
AGCTTGAAGA ACTGTTTTTT CCATGGTAAA TGCTTTTGAA TATTAACCTA GTTATGTTAG      180
ATTCCTACCT CAGTGGTACT GTCACAGCCA TTGGTTACAT TTCTGAAACC CTTCAGAGTA      240
AGAGTTTGG TTTTTTGTG TGTGTTGTTT TGTTTTTTGA GATGGAGTCT TGCTCTGTCG      300
CCCAGGCTGG AGTGCAGTGC AGCAACCCAG GTGGAGTGCA GTGCAACCTC CACCTCCCAG      360
GTTTAAGCGA TCCTCCTAAC CTCGAG                                         386
```

(2) INFORMATION FOR SEQ ID NO:245:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

```
GAATTCGGCC TTCATGGCCT AGCTTCAGTA GCAAATAAGG ACATCATCTG CTATAACCTA      60
CAAGCAGTTG GACAGATATT CTACATTTC TCAATTTCTT ACACCGTCAA TTACATCTGG      120
TATTTGTACA CAGAGCTGAG GATGAAACAC ACCCAGAGTG GACAGAGCAC ATCTCCACTG      180
GTGATAGATT ATACTGTGCG AGTTGGTCAA ATGGCCTTTG TTTTCTCAAG CCTGATACCT      240
CTGCTATTGA TGACACCTGT ATTCTGTCTG GGAAATACTA GTGAATGTTT CCAAAACTTC      300
```

AGTCAGAGCC ACAAGTGTAT CTTGATGCAC TCACCACCAT CAGCCATGGC TGAAGTTCCA 360
CCTTCTGCCA ACACATCTGT CTGTAGCACA CTCGAG 395

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

GAATTCGGCC TTCATGGCCT ACACCTTTCA CTTATCTTAT AGTCACTTAA TTCCTCTACT 60
CTTATCATTT GATATTTTCA TTTTATTGTG TATCTCTGTN NGGCCAAATC AATAGATTTT 120
GAACAATCTC AACTTAAACC TTTTAAAAAA ATCTAATAGG CCCAGTTTCC TCTCAACAAT 180
CTTTGAAGAA CCTTCGAGAA AGGAGAAACA CAGACCTCCC GCTTCTAGAC ATGCACACTG 240
TAACCCGGGA AGAGGGGAGAA GGCATGGAGA CAACTGATAC GGACTCTGTG TCTTCCGCCA 300
GCACATACAC ACAGTCTTTA GAGCAGCTGC TTAACCTCTCC CGAAACTAAA CTTGGSTATGT 360
TACTCTGTCT AAATATGTTT TTCTTATTTA ATTTCACTGT CTTATTTAAT TACTANTACT 420
CTAAGTTACA TATGCTTTTT NGGGCTGCTC CAATAAAATT TCTTTCAATA TTCCACTACC 480
TGTTTGTATT AGTTTCTCTA GAGGGACACT CGAG 514

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

GAATTCGGCT TCATGGCCTA GGTCTTCTGT ACATGGAGAT TAACTGTCT TCCAAAGTGA 60
AGAGTTTATT GTTCTAGATC TTGAGCACAA AGGTTGGTAT ACGTTAATAA AAAAAATAGC 120
AAGGGAAGAA AATCATTTCC TTCATACCAA GTAAGAGAGC ACTTATCATG GTAGGCACTG 180
GCTTTGCAAT TATGAGACCA GTAGTAGAAA TAGCTTTAGT TTCCTCAATT TTCCTGGAGT 240
ATTCTTCAGA CTTTCTTTAC ACTGCTCAAG GTGGGGCGAG TGGCAGGGCG GACCTGGCG 300
ACCTGACGCT GCGGAGGCTC GAG 323

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

GAATTCGGCC TTCATGGCCT AGGAACAGTG TGTGTTTTTG TGTGTGGCTT GCATTCTCTC 60
CTCGTTTTTT GGAGCAGCGT GAGATTATG CAATGCTACA TTTCTCCTC CTGCGCCCTC 120
CTACCCCATC AATGTCTCAT GGGTGGTGTG ATAGAGGCTA TGGGAGTGAA GACCACTGGT 180

```

GTTAGTCTGT GTATAGTTCC TGGGGTGTGG CGAGTACCAG CTCTGACAGC GGAAGAGAAC      240
TATACTGTTG ATTCCCATTA TTCTCAGTAG GTGTGTTCTA TAAAATTGCT GCCAACACCA      300
AATTAGCGAA TCCTGAACCA TCGTTCCTCAG AGGAATAGGG GGTTAGGGTC CTGTGATCCT      360
CAAGTTGCAA CATTGTCTTC GACTGATTAA TATGTAACCT TGTTTATAT GTGCAATCTC      420
GAG                                                                    423

```

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

```

GAATTCGGCC TTCATGGCCT ACCGAAACCA AATAATTCAA GCACTGCTTA TTACAATTTT      60
ACTGGGTCTC TATTTTACCC TCCTACAAGC CTCAGAGTAC TTCGAGTCTC CCTTACCCT      120
CGAG                                                                    124

```

(2) INFORMATION FOR SEQ ID NO:250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

```

GAATTCGGCC TTCATGGCCT ACATCTATGA CTTTTTAAAC ATGCGGCGTT TTGTGAATAT      60
CATGATAATA ACAAGAGTCA ACAGGCTAAG TGAGAGGAGA GGGATGCTAC GCCTACGCTG      120
CCCCACCAC GGCAGCCCG CTTCTGCGCC TTTGGTGTG GATTTTCTTT GTGATTTTAC      180
GGGGTTTGT GTTTTTTTT TCTTGTTTT TGTTTGTTA TTTTCTTG TCCACTTGAT      240
TTGCATGCAA CACCACAAA AAGGAAACAC AAAACCCCGT CTGCTCGAG      289

```

(2) INFORMATION FOR SEQ ID NO:251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

```

GAATTCGGCC TTCATGGCCT AACTATGAG AGGACCGATT GTATTGCACA TTTGTCTGGC      60
TTTCTGTAGC CTTCTGCTTT TTCAGCGTTG CCACACAATG TCTGGCCTTC CCCAAATAG      120
AAAGGAGGAG GGAGATAGCA CATGTTTCAT CGGAAAAAGG GCAGTCCGAT AAGATGAACA      180
CCGATGACCT AGAAAAATAGC TCTGTTACCT CAAAGCAGAC TCCCCAACTG GTGGTCTCTG      240
AAGATCCAAT GATGATGTCA GCAGTACCAT CGGCAACATC ATTAAATAAA GCAAACTCG      300
AG                                                                    302

```

(2) INFORMATION FOR SEQ ID NO:252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

```

GAATTCGGCC AAAGAGGCCT ATTTTTTTT CTGCAAACAC TGTGTATAGT GAGACTTGTT      60
CTACTTTTGA GAACAGGTTA CCTTTTGAAA ATGAGGTTGA GTTCTTCCT TTCTGATGCA      120
TTGATTTTGG AAGATTTTTT TTTCCCCCTT CCCCTCTCCC TCGAG                      165

```

(2) INFORMATION FOR SEQ ID NO:253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

```

GAATTCGGCC AAAGAGGCCT AGCTTCTTTG TATAATTAAA TCTGAGTTTT GTTTGAGCAT      60
CTTTCAACAT GTACCATATT TATGACAATT CTCTTCCATA GGATCTATCT GTTCTGCAAC      120
AAGTATTGAT CTTACAGTAA AATTTTTCAC AAATTCATTA GATTCTATGT CTCTTTTCT      180
GGTAGGAATT TTTGTGCAGG TAGCTATCTC TTGCCTAGA TTATTCTCCT TGTTTAGCTG      240
CTGATTCTTA AACTGGCCTC TAGATTTCCT GATTCTTCC GGTACAGACT TTCTCTTGC      300
AAGTTCTTCC ATCTCTAATC TTTGAGATTA ATCTTCTTTT GAAATGTCCT GCTGCTCTAC      360
TCTTGATGTT CTCGAG                      376

```

(2) INFORMATION FOR SEQ ID NO:254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

```

TCTCCAAGGG AAAATAAATG CTTTACTAT CTAGTTTGTC TCTTTGAGAA TTAAACTCT      60
TTTTTTTTTT TTTCATTCCA GTAGCTTTTG GGGTAGAGTT TGGCTCTTTG AGAATTGCAT      120
ACTAATTAAT TTTAGGGGTG ATTTGTACAT CATCTCTATA TTCCTGAAAC ACAGTAGAAA      180
CAGCCAGCAG TCAGGCAACC ATCTACCATG ACCATTAAAA CATCCCCAAA GTGAAACACC      240
AGATGTGATC TGCTAGATTT AGTGGAGGCG GCTGGCTCGA G                      281

```

(2) INFORMATION FOR SEQ ID NO:255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

```
GAATTCGGCC AAAGAGGCCT AGCTAGNCTT GCTCAGCTTT GTGGATACGC GGA CTTTGT 60
GCTGCTTGCA GTAACCTTAT GCCTAGCAAC ATGCCAATCT TTACAAGAGG AAAC TGTAA 120
AAAGGGCCCA NCCGGAGATA GAGGACCACG TGGAGAAAGG GGTCCACCAG G CCCCCAG 180
CAGAGATGGT GAAGATGGTC CCACAGGCCN TCCTGGTCCA NNTGGTCNTC NTGGCCCCCN 240
TGGTCTCGGT GGGAAC TTG CTGCTCAGTA TGACGGAAAA GGAGTTGGAC TTGGCCCTGG 300
ACCAATGGGC TTAATGGGAC CTAGAGGCCC ACCTGGTGCA GCTGGAGCCC CAGGCCCTCA 360
AGGTTTCCAA GGACCTGCTG GTGAGCCTGG TGAACCTGGT CAAACTGGTC CTGCAGGTGC 420
TCGTGGTCCA GCTGGCCCTC CTGGCAAGGC TGGTGAAGAT GGTCAACCCTG GAAAACCCGG 480
ACGACCTGGT GAGAGAGGAG TTGTTGGACC ACAGGGTGCT CGTGGTTTCC CTGGAAC TCC 540
TGGACTTCCT GGCTTCAAAG GCAACCTCGA G 571
```

(2) INFORMATION FOR SEQ ID NO:256:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 453 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

```
GAATTCGGCC AAAGAGGCCT ATGCGCAAGG ATCAAGCCGA CTACCTGTGC TGTCTACTGG 60
GACAGCAGTC TCCGAGCTAC TCCGTACCTC CCTCTGCCAG GTCGTGGAGT TAGGCCCCAG 120
TCCCTACTTG TCACTGGTTC CCACTGTGCT CCTAACTGTG CAGCACCTGG GAGCTCTGGC 180
CTGGGGCTGG AGGCCCTGGT AGGAGCTGCA GTTGGAGGCC GTTCTGTGCC CAGCAGCGGT 240
GAGCGGCTCC CATGGGCCCT GTGTCTGCAG GGAGCCAGGG CTGCGGCACA TGTGCTGTGA 300
AACTGGCACC CACCTGGCGT GCTGCTGCCG CCACCTGCTT CCTGCAGCAC CTCCTACCCT 360
GCTCCGTGTC CTCCTCTCC CCGCGCCTGG CTCAGGAGTG CTGGAAAAGC TCACGCCTCG 420
GCCTGGGAGC CTGGCCTCTT GATATACCTC GAG 453
```

(2) INFORMATION FOR SEQ ID NO:257:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 307 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```
GAATTCGGCC AAAGAGGCCT ATGTCATGAG TGAAC TTGGC AATTGCCTTG TTA AAACCAG 60
TTGGACATTA TCTTCCACAT TGCGAAGCTA TACATGTCTG ATATGTTCTG AAAGAATAGA 120
ATTTATAGTT AGATATACTA TTTTGTGATTA TTTACTCAGA AGGAGACATG TAATTATTCT 180
TATGTTGTCA TGAAAATCTA TTAATGTCAT TTATATTTCA CATCAATGTT ACGAAGTTCC 240
ATTATTATTA TTTTACAGAG GGAAGCCAA GATACAGGAG TGGA AATTAC TTGGCCTATC 300
GCTCGAG 307
```

(2) INFORMATION FOR SEQ ID NO:258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```
GAATTCGGCC AAAGAGGCCT AAGAAGATGA ACAAGCGCCA GCTCTATTAC CAGGTTTTAA      60
ACTTTTCGCCA TGATCGTGTC TTCTGCACTC ATGATATGGA AAGGCTTGAT CGTGCTCACA      120
GGCAGTGAGA GCCCCATCGT GGTGGTGCTG AGTGGCAGTA TGGAGCCGGC CTTTCACAGA      180
GGAGACCTCC TGTTCTCAC AAATTTCCGG GAAGACCCAA TCAGAGCTGG TGAAATAGTT      240
GTTTTTAAAG TTGAAGGACG AGACATTCCA ATAGTTCACA GAGTAATCAA AGTTCATGAA      300
AAAGATAATG GAGACATCAA ATTTCTGACT AAAGGAGATA ATAATGAAGT TGCTCTCGAG      360
```

(2) INFORMATION FOR SEQ ID NO:259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```
GAATTCGGCC AAAGGGGCCT ACCTGAAACG GCAGTCCGGT CCCTCCGACA TTGTCCAGCG      60
GAAGGCCTGG GCTTCACACT CTGTGCCTCC CGGCGCTACC TGGCACGATG CCGAGCACAC      120
AGCAGATGCT CAATGAATGC CCAACCAACC CTATACCTGG CTTGGATCTC AAGCTCCCTG      180
GCCGGGGCCT GATGGAAGGC TTTGGGGGCA CAGGAGGCTG CCCCCTTGGG CGCCCCCGGC      240
CACCTCTTCG CCCTCGAATC TCAGGCAGCT TGGTCAGGAA CTTCTTCTCC ACGTATTTAG      300
CGTGAATCCA GGCCTCCTTC TCCTGCCTGT GGGAGGGGAG AAGCACGCAG TCTTCCCTCT      360
TCTGCTCCAG GGGTCCCCCA TTCCCCTGGG AGGCTAAACC CATAGCTCGA G      411
```

(2) INFORMATION FOR SEQ ID NO:260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```
GAATTCGGCC AAAGAGGCCT AGGGAGTGTT TCGTTTTCTT CTCCGTTTGG CAGTGAAACA      60
CATCTCAGAA AGGTGGAGCT GATCAGAATA ATGTTCAAGCA TCAACCCCTT GGAGAACCCTG      120
AAGGTGTACA TCAGCAGTCG GCCTCCCCTG GTGGTCTTCA TGATCAGCGT AAGCGCCATG      180
GCCATAGCTT TCCTGACCCT GGGCTACTTC TTCAAAATCA AGGAGATTAA ATCCCCAGAA      240
ATGGCAGAGG ATTGGAATAC TTTTCTGCTA CGGTTCAATG ATTTGGACTT GTGTGTATCA      300
GAGAATGAAA CCCTCAAGCT CGAG      324
```

(2) INFORMATION FOR SEQ ID NO:261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

```
GAATTCGGCC AAAGAGGCCT AGTGGGGCTG TATTTTAATA CAAGAAAGAC ATTGCTCTAG      60
AACATGGCTC GCCTTTGCTT CAGGGCCTAG CAGTTTATTT TAGCCATAAG GGTAAGGGAG      120
CAGGTCAGAA ATGACTTTTA GTGTAATCCT ATCTGTAATT AAAAATACAA ATGCTGTCAT      180
AAGATCAAAT GTTATCAAAA ATCAGTATTT AAAATTAAAT TTACCCCAA ATTTCTTTCA      240
AAAAAGTTGT AATGTTCTTT TTCAGTGAAG CCTTTGCACT GCTAGAGCTG AAGAATGTGA      300
TCAATCGGCT TGTGAATAA TCCCGCACAG TAGGTATTCC GCTGAAGCCA ACTCTAGCTG      360
GGGGCTCGAG                                     370
```

(2) INFORMATION FOR SEQ ID NO:262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

```
GAATTCGGCC AAAGAGGCCT AAGAAATAGG ACTATACAAA TTTTCAACTT CTTTGTATAT      60
CAGTTTTGGT AAGATGCATT TTTCTTCTGA GAATTTGTTT CATTTGAATT TCCAAATTTA      120
TTAGCATGAA GTTGTTAATA AAAATCTTAT ATTTTACTC AAATTTTGAG ATAGTTGTAG      180
ATTTACATGA AGTTGTAAAG AATAATAGAA AGATCCTGTG TACCTTTCC CAGTTTTCCC      240
CAAAAGTAAC ATTTTGCATA ACTCTAGTAC AGTAGCACAA CTCGAG                                     286
```

(2) INFORMATION FOR SEQ ID NO:263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

```
GAATTCGGCC AAAGAGGCCT AGGCAAACCG TGTACTAAGC ATCAGTGCAG AGATAGTGAA      60
TGAGACACAG TATTCCACC TTTGAGCAGT GCCAGTCTAG TATTAGAATA TTTTGGCTA      120
AAAAATTATT TTGAAGCATA AAGAAGCTTT TGTGCTCT GGTGATTTTC ATAACATATT      180
CACATTCTTA ATGTATTTT GGTTTTTCAG AAAGTTACTT CTGGCCTGTG TTCTTTCAGA      240
ATATAGGTTG CAGCTTGTGT TAAGTGCAGG AACTATTGAT AGACTGAGTT TAGAAGAAGG      300
GAAACTCGAG                                     310
```

(2) INFORMATION FOR SEQ ID NO:264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

```
GAATTCGGCC AAAGAGGCCT AGGACTTTGG GGCAGGTGAT TAAATTTATA TAGGTACCTC      60
AAGAAAAAGA ACCTGAATAT GCTGCATTTT CTTTCTTTAG CTTTACATG TAGCATTTTG      120
TTTTGCTTTT GTTATTTTGG TTTTGATATA TGCTTTTGG ACCCCAATAG ACTGTTGAAA      180
GAAATTTAAA AATTACTCTT GTAGGATAT AGTATCCTTA AAAAATAAAA ATTAAAAAAA      240
ATTTAAAAAA ATTGCTGCAA TATCTGGCTC GAAGGTTGCC CTATATTAGA ATAATACTTT      300
AGCCAAACAC ATCAGCTCGA G                                     321
```

(2) INFORMATION FOR SEQ ID NO:265:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 550 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

```
GAATTCGGCC TTCATGGCCT TGTGATTCTG CAAAGGAGGA ACAATAATTC ACTGTTTCCC      60
AAACTTATCT GACCATAGAA CATATNTCTC AGAGTATTTT TCAAGAGTAG TATTTTCTGT      120
AATATATGAT GAAAAATAAT CGTATCGGCC ATCTTTGTAC ATAAGGTCAA AATGTCAGCC      180
AGCCCTGAAA TAAATGCAAG CCAAAAGGTA GAGAGATAAG TGAATAAAGC TGGCACACTG      240
TCAGTCCGGA GTACCATGCT GCATTCTGAG TCAAGCTCCA GGAAACTGAG CTAGGGTTTG      300
TCTCTAAGAA GAAAAACTGG AGCGTCCAAA GCCTCTGGAT TCCATTTAAT TAAAACCCTT      360
TTAAATTAAA TCCTTGTAAC TGAAGAGTAT CGGTGGATGA AGAAAAATA GTCTCACATG      420
TCTTCATTTT CATCCTTGGC TCAGTACAGC TCCAGTTCCA TTATTCTTAA ACATCTATTA      480
ACATGATTGC TAAATAATTA CACAGGCTAA CTGCCAAGCA TTTTTCACAG GAAGCAAGGC      540
ACTGCTCGAG                                     550
```

(2) INFORMATION FOR SEQ ID NO:266:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 301 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

```
GAATTCGGCC TTCATGGCCT AGTTAAGTGG GAAGTTAAAT GGCAAGTACT AGAATGCCAC      60
CTATGGCAAG CACTAGAATG GTCTAGGTGT GAAATGAGGG AGTAATGTCA GGGAGTCAAG      120
GTGGCCATCC ATAGCAGTGA TTCTTATCTG GGGTAGGGGG TGAATTCAC GTGGAGGGAG      180
GTCTCTGGAC ATGGACCCCC AGGCAGGGCT ATCCAATCAT CTGAGGGGTG AGCAGTGTTT      240
AGCTCAGTAA AAGTAAGGGA AAAAAAATAG CAGTCTCTAA AAGGAACATA GAGCGCTCGA      300
G                                     301
```

(2) INFORMATION FOR SEQ ID NO:267:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```

GGGGAGAGCA TCAGGAAGAA CAGCTAATGG ATGCTGGGCT TAATACCTAG GTGATGGGAT      60
GGTCTGTGCG GCAAACACCA TGGCACAAGT TTACCTATGT AACCTGCACA TCCTGACATG      120
TACCCCTGAA CTTAAATGA AAGTTGGAGA CCAAAAAACA AAACACCATA AAATAACAAA      180
ACTTCTTAAA CAATAAACTA GTAGAAAATT TCTAAAATAT ATAATTCAAG AATTATATAA      240
GAGCTCTTTT TATATGTAAA TATAAATTTA AATACAAGAG AAACATCTAA AACAGGTTGC      300
TTCTGAGAAA CGTGACTGGT TATTAAGAAG AGGTATATAG GGGCTCACTC GAG              353
  
```

(2) INFORMATION FOR SEQ ID NO:268:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 241 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```

CATTATTTAA CCTTTTAAAC AATCAAGAGA TTGCTTTTTA AATTGTCTCT AAAAAGGTTT      60
GATTTTTTAC GAAAGAGAGA GCACTTGAAT ATATCTTTAT GTACCACCGT GTCTCTTTT      120
GTTAGATTTT TCATCTGTGG GTATAATATA AAATATTCTT AAAATGAAAG CTTACGCTT      180
GTGTTTGAGA CTAAGCAACT TGCATTGTGT CATGACCCTT CTAATACCAC AAACCCTCGA      240
G                                          241
  
```

(2) INFORMATION FOR SEQ ID NO:269:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```

GAATTCGGCT TCATGGCCTA CACTCAACCA CTGAAAAAGC TGAAAATCAA TGTTTTTAAG      60
GTTTACAAGT GTGCCGTGTG TGGCTTCACC ACCGAAAACC TGCTGCAATT CCACGAACAC      120
ATCCCTCAGC ACAAATCGGA TGGTTCTTCC TACCAGTGCC GGGAGTGTGG CCTCTGCTAC      180
ACGTCTCAGC TCTCTCTGTC CAGGCACCTC TTCATCGTAC ACAAGTTAAA GGAACCTCAG      240
CCAGTGTCCA AGCAAAATGG GGCTGGGGAA GATAACCAAC AGGAGAACAA ACCCAGCCAC      300
GAGGATGAAT CCCCTGATGG CCCCCTCGAG              330
  
```

(2) INFORMATION FOR SEQ ID NO:270:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 297 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

GCGGGCACCA	TTTCCAGTAT	GTACCAAACC	AAAGCCGTCA	TCATTGCAAT	GATCATCACT	60
GCGGTGGTAT	CCATTTTCAGT	CACCATCTTC	TGCTTTCAGA	CCAAGGTGGA	CTTCACCTCG	120
TGCACAGGCC	TCTTCTGTGT	CCTGGGAATT	GTGCTCCTGG	TGACTGGGAT	TGCTACTAGC	180
ATTGTGCTCT	ACTTCCAATA	CGTTTACTGG	CTCCACATGC	TCTATGCTGC	TCTGGGGGCC	240
ATTGTTTCA	CCCTGTTCT	GGCTTACGAC	ACACAGCTGG	TCCCAGGGAA	CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:271:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

GCCGACTAC	CACAAGCCCC	ACCCACACTA	TGCCAAGCCC	TACCCATACC	ACAGCAAGCC	60
CCACTCATAC	TTCCACAAGC	CCCACCCATA	CCCCACAAG	TCCCACCCAC	AAAACCAGTA	120
TGTCACCTCC	CACCACTACA	AGTCCTACCC	CCAGTGGTAT	GGGCCTAGTC	CAGACTGCCA	180
CAAGTCCCAC	CCATCCTACC	ACAAGCCCCA	CCCATCCCAC	CACAAGCCCC	ATCGTTATAA	240
ATGTAAGCCC	TTCCAATTCT	CTAGAATTG	CTACCCTCTC	CAGCCCCCTC	AAACACTCAG	300
ACCCACCCCT	CCCAGGCAAT	GACTCCCTTC	CCTGTAGTCC	CCCAGTCTCC	GATTCTTACA	360
CTCAGGCAGA	CCCTATGGCC	CCCAGAACTC	CCCACCCAAG	TCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

ACTGAGCTCA	AGGACCCCTC	CAAGAAGAAG	ATGCAGCACA	TCTCCAACCT	GTCCATCGCT	60
GTCATGTACA	TCATGTACTT	CCTGGCTGCC	CTCTTCGGCT	ACCTCACCTT	CTACAACGGG	120
GTGGAGTCGG	AGCTGCTGCA	CACCTACAGC	AAGGTGGACC	CGTTTGACGT	CCTGATCCTG	180
TGTGTGCGCG	TGGCCGTGCT	GACAGCAGTC	ACGCTCACAG	TGCCCATCGT	TCTGTTCCCG	240
GTGCGCCGCG	CCATCCAGCA	GATGCTGTTT	CCAAACCAGG	AGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 537 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

GAATTCGGCC	TTCATGGCCT	AGTCAAGCTA	GGTAAGCTAA	AAAGAAGAAA	ACCTGGTTAC	60
AGCCCGGTGA	ATTGATTTT	TTCCAGCCGA	GAAATAGATA	TTTCTCTCAC	ATATATTTGG	120
AAAACCTTAG	TCATCTTCAT	AAAACCTAAA	AAGTTACCTA	AGCACACACA	GCAAGTTTCT	180
CCTTTCTTCC	TTTTCCACAC	CCTTACCAGT	TCACTATGTT	TCTACCAATC	CAGTGCCCG	240
TTGCCAATGA	TGTTGCTCTC	ACATGAATT	ACTGCATTCC	CTTCTGGTTC	CCCAGAAGGT	300
CTTGAAGAAA	GAGGTTTCTA	CTAGTGGACC	CAAACAGAAT	TTCTTGGCTG	GTGATACTCA	360
GATTGTGTTT	AGAGCCTGGT	ATGAAGAAGG	GGCCAGGTGT	AAGAAGTAGT	TAATCAACTG	420
CACGTTGATT	TCAGGCTGAA	TATTCAACCA	TCTGCAGCCA	CCCGTCTCTA	AAAGTCTAGC	480
TGAAGCACAA	TTGATTGTGC	CATAGAATGA	GCAAACGCTT	GAAAACACAA	GCTCGAG	537

(2) INFORMATION FOR SEQ ID NO:274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

GCGAGCTCGT	GTTTTAAAGG	ACCAAATAGA	AGTTTACCAG	GAGAGAAGTG	ACAGAAGTGC	60
TGTCTAGATA	GAGGAAGGGC	ACACACAGAT	GCAAGCATGT	GCAGAAATGA	GCAAACCACT	120
GAGACGCTGC	CTTGAGCTCT	GTGTCACACT	GCTATGTTGC	AGCCTGGGAG	GCTGTTCCCA	180
GTTGAGCCCT	TCGGAACCAG	CCATGAGATG	GCACGGGTAC	GCGGAAGGGA	GCACTCTCCA	240
TGGCTGGGTG	GTGATGGGGG	CTTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

GATGGCTCCC	CAGAGCCTGC	CTTCATCTAG	GATGGCTCCT	CTGGGCATGC	TGCTTGGGCT	60
GCTGATGGCC	GCCTGCTTCA	CCTTCTGCCT	CAGTCATCAG	AACCTGAAGG	AGTTTGCCCT	120
GACCAACCCA	GAGAAGAGCA	GCACCAAAGA	AACGGAGAGA	AAAGAAACCA	AAGCCGAGGA	180
GGAGCTGGAT	GCCGAAGTCC	TGGAGGTGTT	CCACCCGACG	CATGAGTGGC	AGGCCCTTCA	240
GCCAGGGCAG	GCTGTCCCTG	CAGGATCCCA	CGTACGGCTG	AATCTTCAGA	CTGGGGAAAG	300
AGAGGCAAAA	CTCCAATATG	AGGACAAGTT	CCGAAATAAT	TTGAAAGGCA	AAAAGCTCGA	360
G						361

(2) INFORMATION FOR SEQ ID NO:276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

GCCACAATAG	CGGGATTGAT	CTCCTTAGGA	CCTATCTTTG	GCCTTGCCAG	TTCCTTTTAC	60
CTTTTGTGAG	TTTAGGTTTG	ATGTGCTTTG	GGGCTTTGAT	CGGACTTTGT	GCTTGCAATT	120
GCCGAAGCTT	ATATCCCACC	ATTGCCACGG	GCATTCTCCA	TCTCCTTGCA	GGTCTGTGTA	180
CACTGGGCTC	AGTAAGTTGT	TATGTTGCTG	GAATTGAACT	ACTCCACCAG	AACTAGAGC	240
TCCCTGACAA	TGTATCCGGT	GAATTGGAT	GGTCCTTCTG	CCTGGCAGAA	CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

GAATTCGGCC	TTCATGGCCT	AGGATGTAGA	ATCCTGCTTA	TCTGTGAAAT	GCAGTTGACA	60
CATCAGCTGG	ACCTATTTCC	CGAATGCAGG	GTAACCCTTC	TGTTATTTAA	AGATGTAAAA	120
AATGCGGGAG	ACTTGAGAAG	AAAGGCCATG	GAAGGCACCA	TCGATGGATC	ACTGATAAAT	180
CCTACAGTGA	TTGTTGATCC	ATTTCAGATA	CTTGTGGCAG	CAAACAAAGC	AGTTCACCTC	240
TACAAACTGG	GAACAATGAA	GACAATGAAC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

TCGTTCCCTT	CATCTCTTCC	CTTGCCAGAG	CAGGGACTCT	CTCCATATAA	ACAAAAGGAA	60
AACCACTGGC	CAGGGTATGG	TCAATACCTC	AACATATCCA	GACATCACAG	CACCAGAACA	120
CCAGTATGTA	TATTCCACAA	GTACTCGAG				149

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

GCAATCAGAT	AAAGAAAGAC	CTGGCTGACA	AGGAGACACT	GGAGAACATG	ATGCAGAGAC	60
ACGAGGAGGA	GGCCCATGAG	AAGGGCAAAA	TTCTCAGCGA	ACAGAAGGCG	ATGATCAATG	120
CTATGGATTG	CAAGATCAGA	TCCCTGGAAC	AGAGGATTGT	GGAAGTGTCT	GAAGCCAATA	180
AACTTGCAGC	AAATAGCAGT	CTTTTACCC	AAAGGAACAT	GAAGGCCCAA	GAAGAGATGA	240

TTTCTGAACT CGAG

254

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

GACAGCCTGG AAGTTTGGAG ACCCTGACAC ACCCACCTTC TCACCTGGGC TCTGCGTATC	60
CCCCAGCCTT GAGGGAAGAT GAAGCCTAAA CTGATGTACC AGGAGCTGAA GGTGCCTGCA	120
GAGGAGCCCG CCAATGAGCT GCCCATGAAT GAGATTGAGG CGTGGGAAGG TCGGAAAAAG	180
AAAGCCCGCT GGGTCCTGCT GGTCTCATT CTGGCGGTTG TGGGCTTCGG AGCCCTGATG	240
ACTCAGCTGT TTCTATGGGA ATACGGCGAC TTGCATCTCT TTGGGCCCAA CCAGCGCCCA	300
GCCCCCTGCT ATGACCCCTG CCTCGAG	327

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

GCCTGGAACC TGATTCTCCT GACCGTCTTT ACCCTGTCCA TGGCCTACCT CACTGGGATG	60
CTGTCCAGCT ACTACAACAC CACCTCCGTG CTGCTGTGCC TGGGCATCAC GGCCCTTGTC	120
TGCCTCTCAG TCACCGTCTT CAGCTTCCAG ACCAAGTTCT ACTTCACCTC CTGCCAGGGC	180
GTGCTCTTCG TGCTTCTCAT GACTCTTTTC TTCAGCGGAC TCATCCTGGC CATCCTCCTA	240
CCCTTCCAAT ATGTGCCCTG GCTCCATGCA GTTTATGCAG CACTGGGAGC GGGTGTATT	300
ACATTGTTCC TGGCACTTGA CACCCAGTTG CTGATGGGTA ACCGACGCC GCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

GCGGGCTGCA GAATGATAGA CGAGCTCAAC AAAACGCTGG CCATGACCAT GCAGAGGCTG	60
GAAAGCTCTG AGCAGCGGGT CCCCTGTTCC ACTTCTTACC ACAGCTCTGG GTTGCACTCG	120
GGTGATGGGG TCACCAAAGC AGGACCTATG GGCCTTCCAG AAATAAGACA AGTGCCAACT	180
GTTGTGATTG AATGTGATGA CAATAAGAA AATGTGCCCTC ATGAGTCAGA CTACGAAGAC	240
TCTTCTTGCC TGTATACAAG AGAAGAGGAG GAAGAGGAGG AGGACGAAGA CGACGACGAA	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

```

AATCAATCAA CTAGGCATAT GACACAGTAG TCCATTATAA AAGAAGACAT ACATCCAGCA      60
CCATCAACTA ATTCTTAAGA TAAGTTATCT GGGAAAATTG AAGAACAAAT AAATTCAACG      120
AAATACTGTA AAGTGAACGA AGACATAAAA CCAAAGAAAA CTGAGGCCAT TTCTGCCAAG      180
AAAGGAACAG CAAAGAGTAA AGATGAAAAA TATTCTAAGA TAATACCAGA AAAAGATAAT      240
TCCTACATGG ACAAAGATGA GCATGGTTCA TCCTCTGAAA GTGAAGATGA AGCGCTGGGT      300
AAATATCATG AGGCCTTATC CAGAACACAC AATTCGGAC TACCACTCGA G                351

```

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

```

AAGTTAAAGG TATTAAATAA ATGAGTTTCT CCTTAATTTT GTTAATGCTC TTTTAGCTAA      60
TAAGACTTTT TCTAGAGTTA CATATTTTAA TCTGTTTCAT TTTTATTTT TCCTTTGGTT      120
TTATATTTT AAAAGCCATT ATATCCCTCC CACTGGTAAC ATACACATAC ACAGACACAC      180
ATCTATTTC AATGAATACT TACTACTTTA TCATTTTCAG TCTTAATTGT ACT                233

```

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

```

GCGGCGCCGC AGCAGTTCCA GGAAGGATGT TACCTTTGAC GATGACAGTG TTAATCCTGC      60
TGCTGCTCCC CACGGGTCAG GCTGCCCCAA AGGATGGACT CACAAGGCCA GAATCTGAAG      120
TGCAGCATCA GTCCTGCCC AACCCCTTCC AGCCAGGCCA GGAGCAGCTC GGACTTCTGC      180
AGAGCTACCT AAAGGGACTA GGAAGGACAG AAGTGCAACT GGAGCATCTG AGCCGGGAGC      240
AGGTTCTCCT CTACCTCTTT GCCCTCCATG ACTATGACCA GAGTGGACAG CTGGATGGCC      300
TGGAGCTGCT GTCCATGTTG ACAGCTGCTC TGGCCCCGAG AGCTGCCAAC TCTCCTACCA      360
CCAACCCGGT GATCTTGATA GTGGACAAAG TGCTCGAG                                398

```

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

```
GAATTCGGCC TTCATGGCCT ACACCCAGCC AATTTTTTTG TATTTT TAGT AGAGACGGGG      60
TTTCACCATG TTAGCCAGGA TGGTCTCTAT CTCCTGACCT CATGATTGTC CCGCCTCGGC      120
CTCCAAAAAA AGAACATTTT ATATTGAGT GCTATTCTT TTGCGGCACC AAAACTTTAT      180
AACACACTGC CTTCTGAATT TTTT TTTTG GTTCTGCTC AGCTCATTGT TAATCATATT      240
GTTCCCATGT ATGTCATGAG TTATTTTCT CCTAGTCTTT TCAAAATTTT CTTGTCTTTG      300
ACTTTTAACA GTTTAATTGT AACAGTGTAT ATCTTTAAAG TTAAATTCAT GCTTGTGAAT      360
TTTTATAAGA GCCACAAAGG CTTCTCTG TGTTTGTTT TTGTTTGT TTTGTTTTC      420
ATTTTGTAGA CAGGCTCTCA CTGTCCCTCA GTGGCTCTCG AG      462
```

(2) INFORMATION FOR SEQ ID NO:287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

```
TGGACAGTCT AGAAGATGCT GTGGTGCCCC GGGCTCTGTA TGAGGAGCTG CTGCGCAACT      60
ACCAGCAGCA ACAGGAAGAG ATGCGCCACC TCCAGCAGGA GCTGGAGCGG ACTCGGAGGC      120
AGCTGGTACA ACAGGCCAAG AAGCTCAAGG AGTACGGGGC ACTTGTGTCT GAAATGAAGG      180
AGCTCCGTGA CCTTAACCGG AGGCTCCAGG ACGTGCTGCT CCTGAGGCTT GGCAGCGGTC      240
CCGCCATTGA TCTGGAAAAA GTAAAGTCAG AATGTCTCGA G      281
```

(2) INFORMATION FOR SEQ ID NO:288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

```
AATGGAAGTCT CTGACACAAT ACTCGTGTA CTGTGTGGAA CCGCATAATC CCAGCAATGG      60
CACATTGAAG GAATGGAGGG AATCCAATAT TTCTGCCTCT GACATAATTT GGGAGAACCT      120
AACTGTGTCA GAATGCAAAT CATTGCATGG AGAGTATGTT GGACGGGCCT GTGGCCATGA      180
TCACCCATAT GTTCCAGATG TTCTATTTTG GTCTGTGATC CTGTTCTTTT CCACAGTTAC      240
TCTGTGAGCC ACCCTGAAGC AGTTCAAGAC TAGCAGATAT TTCCAACCA AGGTTTCGATC      300
CATAGTGAGT GACTTTGCTG TCTTTCTTAC AATTCTGTGT ATGGTTTAA TTGACTATGC      360
CATTGGGATC CCATCTCCAA AACTACAAGT ACCAAGTGTT TTCAAGCCCA CTAGGCTCGA      420
G      421
```

(2) INFORMATION FOR SEQ ID NO:289:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

```

AAGCCAATGG CTGGTCGTGA TCCTGAATGC CAACGCACAG AAATGATTAA GAAAGAAGAA      60
GAACGTTTGA GGGCTTCCAT ACGTAGGGAA TCTCAGCAGC GCCGAATGAG AGAGAAACAG      120
CACCAGCGGG GGCTGAGCGC CAGTTACCTG GAACCTGATC GATACGATGA GGAGGAGGAA      180
GGCGAGGAGT CCATCAGCTT GGCTGCCATT AAAAACCGAT ATAAAGGGGG CATTTCGAGAG      240
GAACGAGCCA GAATCTATTG ATCAGACAGT GATGAGGGAT CAGAAGAAGA TAAAGCTCAA      300
AGATTACTCA AAGCAAAGAA ACTTACCAGT GATGAGGTAA GACCAAATTT ATTCAATTCT      360
AGGGGTTTAT CCTGTACTCA GGAGCCAAC TCTTTGAATG AAAAGCTCAC ACTCGAG      417

```

(2) INFORMATION FOR SEQ ID NO:290:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

```

CAAGCATACA ATCAACTCCA AGCTCGGTAT CACCTGAGCC CAGGAAGTGG AGGCTGCAGT      60
GAGCTATGAT CAGTAAACA CAAGACAGGT TCACTGGCTC CCATCCCAAC CCGGACCAGC      120
TCCCTAGTAT AACAACCTAC ATGCATGTGG ACTATACCCT TACAGCCTTC TTCTGTGTGT      180
TTATGTGCAT ATATGTAGCC ATAGGAAAAA AAATCAAAAT CCTTTGGTGT TCTTTCTTAT      240
TTTTTCAAAT ATTTCACTG CCCCATTCTC TTTCTTTCT CTTTCTAGTA CTCCCATTCG      300
ATGCAGTTCT CGAG      314

```

(2) INFORMATION FOR SEQ ID NO:291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

```

GTGTATGTGG GGGGTAAGTG TGTGTGTGTG CGTGTGCGTG TATGTGCACG TGTGTGTGTG      60
GTGCCGCTGC ACACGGAGAG CCCACTCATA CGTAGCAGAA AATCAAATGG CCCCAAATCA      120
GAAACATGGC GCATGTGAGC ATGCCACTTC TTGTGTGCCT GTGACTGTTC AGAATGTACA      180
CGGCCCTGCA GCTCCCGAAG GCCAGCTCTG CTGCAACCCC TCCTCTGTCC AACACAGTCC      240
TCACTGGTGT CTTTCTCTCT TCAAATCTAC AGCATTCTG ATCTCTGCAA ACAATTTAAC      300
CCAAACCAA GTTCTGGCTG ACAAGGCTAC ATCTTGTTTC TTGTGCGTGA TTAGCCTCGA      360
G      361

```

(2) INFORMATION FOR SEQ ID NO:292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

GCGATTGAAT TCTAGACCTG CCTCGAGTCG ATGCACCGAA AAGGGTGAAG TAGAGAAATA	60
AAGTCTCCCC GCTGAACCTAC TATGAGGTCA GAAGCCTTGC TGCTATATTT CACACTGCTA	120
CACTTGCTG GGGCTGGTTT CCCAGAAGAT TCTGAGCCAA TCAGTATTTC GCATGGCAAC	180
TATACAAAC AGTATCCGGT GTTTGTGGGC CACAAGCCAG GACGGAACAC ACTCGAG	237

(2) INFORMATION FOR SEQ ID NO:293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

GAATTCGGCC TTCATGGCCT ACTTTATTTT TTTAATTATT ATTAGTATTA TTTGAGACT	60
GAGTCTTGCT CTATCACCCA GGCTGGAGTG CAGTGAGCTG AGACTATGCC ACCGCACTCC	120
AGCCCGGGCG ACAGAACGAG ACTCCATCTC NAAAAAAAAA AAAAAAATCT ATGTTTCATGC	180
CTTNACACCT GTTCTGTCAC ATAGCTGTGC AGTATATTCT TCTTCTAAGC AACGACCCAG	240
TGAAGATCCA AACAAAAGTT CACAAATATG TAGTTATCCA AGGCACCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 136 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

GAATTCGGCC TTCATGGCCT ACAATCTTTT AACTTTGGGG GTCACAGTTT TAGCCACCTT	60
TGGGGGGGTG ACTGGAGCAG TAGGAGGTGT GGGGTCATT TATGAATATA ATAAATGGA	120
GCTGACTGTA CTCGAG	136

(2) INFORMATION FOR SEQ ID NO:295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

GAATTCGGCN	TTCATGGCCT	AAAATAACAC	ACAATTAGTA	TAGAAAAATT	GCAAACACAG	60
ATAAAAGTCC	TTTCCCTGTG	AATTTCTGAA	TGCACCTTTG	AATATTCACA	TCTTACTGCC	120
AAAATGAGAT	TGTCTTGTGT	GCCGTTCTGG	AATTTGCTTT	TTTCCAGCTT	ACATGTTCTA	180
GGTCCTTCCA	GATCAATAGC	TGCACTCCCT	CCTTCCTCTG	CTGGTTTCTC	AGCTCGATGG	240
GCTGTAAGTG	GCATTACTCT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

GAATTCGGCC	TTCATGGCCT	ACAACCTCAT	AAATCTCATT	CTTAATTTCA	CTCTAGGACA	60
GAATTATTGT	AGCACCTGTG	TTCTGTTATT	TTAGATTCAT	TTAACTTAC	CTAGACACGG	120
GTACTGTGGT	AGTTGTAGAG	GTACAGATGT	TGAGTTCCCA	TCCTCCTGGC	TTAATGTCAC	180
TGGGGTTATT	AATACACTTC	ATAAGCATT	TAGGGACACC	TGCTGTCTGC	TCAACCCCGA	240
GCAAACCTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

GAATTCGGCC	TTCATGGCCT	ACATCTGGTA	AATTTTTCTT	TCTGCCTGAG	GAACACCCTT	60
TAGCATTTAT	TTAGTCTGCT	GGTGACCAAT	TCTCATATTT	TGTTTGTCTG	AAAAATACCT	120
TTATTTTGTT	TTAATTCTTG	AAAGATATTT	GCACTGGTGT	GATTGGATTG	ATGATTGCTT	180
ATTATTTTCT	TTTCTTTTTT	TCTTTTTTGA	GACAGAGTCT	CGCTGTCGCC	CAGGCAGGAG	240
TGCAGTGGCC	CGTACTCGAG					260

(2) INFORMATION FOR SEQ ID NO:298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

GCTCTGAATC	TATTTTCTAG	GACATTTTTT	TCCCATTTAG	ATTAAGCCAG	AGAGAGCCCT	60
TTCTTGCCTC	CCAAGAGTTT	TTCTTTGTGT	GACTGTTGGT	ATTCTGAACC	TCTTGGATT	120

GATGCCTGGA ATTGCCTAG AGACTCTCCT GATTTCGTGC TCATTCTTTG ATTTACCCCT 180
 GGGGAGCTGG GGAAGAGATA CCTTCCCATG GCATCACTTG TTAAGAGTGG ATCCCCCTTC 240
 CCCCCTTCCT TCTGTCCCCC TCGAG 265

(2) INFORMATION FOR SEQ ID NO:299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAATTCGGCC TTCATGGCCT ACCAAAACAA AAGAAGAAAT CATTTCACCTC ATGCTTAGAA 60
 AGATGTCAAG AGGATGGAGG ACTCACATTC TGTAACTCT TCTGCCTGTA ATATATGCTT 120
 TAAACACTAA AAATGATGAG CATGAATCTG CAATTCAAGC CCTCAAAGAT GCTCATGAAG 180
 AAGAAATTCA ACAAATTCTT GCTGAAACAA GAGAAAAAAT ATTGCAGTAT AAAAGCAAAG 240
 TAACAGAGGA GCTAGACCTT AGAAGAAAGA TTCAAGTTTT AGAATCATCA TTAGAAGATC 300
 ACAATCTCGA G 311

(2) INFORMATION FOR SEQ ID NO:300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GCGATTGAAT TCTAGACCTG CCTCGAAGTC GTGGCCTCAA GTGATCCACC TGCCTCACCC 60
 TCATCACCTG CCAAGTCCTA CCCATTCTAA CCCTGATAGC TCTTAAATCA GGTCTTTCCA 120
 CCTCAAGCTC ATTATCACTG CTCTAGAGCT CAAGCCTTCA GTGTCCTTTC ACTTCCTGAA 180
 TTTACTGTCT TAGTGCTCTT GCTCACATTG TATTCTNTGC CCAAAATGCT CTTACCACTC 240
 CCNTTCTTTC TCGAG 255

(2) INFORMATION FOR SEQ ID NO:301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GAATTCGGCC TTCATGNCCT ACTTGGATTT ATCACAGTAG CATTGTCTT CAATCTGTGT 60
 GTTAACTAGA AATCAAGGAA AGACATGAGG AGATTGTCT ACTGCAAGGT GGTCTTAGCC 120
 ACTTCGCTGA TGTGGTTCT TGTGATGTC TTCTTACTGC TGTACTTCAG TGAATGTAAC 180
 AAATGTGATG ACAAGAAGGA GAGATCTCTG CTGCCTGCAT TGAGGGAGAT CCGCACGCAG 240
 CTGGTGGAGC AGTTCAAATG TCTGGAGCAG CAATCAGAGT CGCGACTGCA GCTGCTTCAA 300
 GACCTCCAGG AGTTTTTCCG CCGGAAAGCT GAGATTGAGC TCGAG 345

(2) INFORMATION FOR SEQ ID NO:302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

GAATTCGGCC TTCATGGCCT AATCCTCCAG ATTATTATGG ATATGAAGAT TATTATGATT	60
ATTATGGTTA TGATTACCAT AACTATCGTG GTGGATATGA AGATCCATAC TATGGTTATG	120
AAGATTTTCA AGTTGGAGCT AGAGGAAGGG GTGGTAGAGG AGCAAGGGGT GCTGCTCCAT	180
CCAGAGGTCG TGGGGCTGCT CCTCCCCGCG GTAGAGCCGG TTATTCACAG AGAGGAGGTC	240
CTGGATCAGC AAGAGGCGTT CGAGGTGCGA GAGGAGGTGC CCAACAACAA TGATCTCGAG	300

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

GAATTCGGCC TTCATGGCCT AAAAAAAGA AGTTTATTTA AAGAACTCT ATAAGAGCAG	60
CTTGGATTTT ATATCTTTAG ATCCAGAGTT TTTACTTTC TGGAATTAAA TATAATTGTT	120
TGGAATTTAC TCTTTATTGT TGAATTTTAA AGCGTGAATA AAGTAGTGCT TCTTAAGATA	180
ATTGTCAATG GTTTTGTGTT TGTGTTGTTT TGTTTTTTGG TGCTGAGTGT TGCTCTGTCC	240
CTCAGACTGG AGCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

GAATTCGGCC TTCATGGCCT ACAATTCCGA TAAAGTTTAA GGTCAGCTGA TGAAGAACAC	60
TCAAACCAAA GTCGCCCATG GGAGGAGCGC CCTACCTCAC AGGAATAGGC CTGCATTATT	120
AGTATACCTT CTTCAATCAG TTATTGTTAT TCTTATGGAA ACAACCCATG GGAAATGTAG	180
CCTTGGCATG ACTGTATCAA TGGATTCAGA GAGCAGTAGC GGGGACCCCC CCAGTCAATT	240
ACGTTCCACA GCAAGTCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

```
GAATTCGGCC TTTCATGGCC TAAATCTCAT AAATAGAAAG NAAAATAATC TAGAAATTTT      60
TCAAAGCTAG TACTCTTTCT CCTTATAAAT GTACACAATT TTAATCTTTT TACAAATTTA      120
TTTAACTGTA CCTACTGTAC TTATTGTAGA TTCAATGACG CAGTTAAGTC ATCACCCAAG      180
GATTTATGAA TTTGAGATTA CTGACCTGTT TTCTTCATAT TGCATTCACT TCAATATTTG      240
TGAATTGTT GTTCAGCTTT TCATTCAAAC AAAAAATATT CCCCCAAGAA AACTCGAG      298
```

(2) INFORMATION FOR SEQ ID NO:306:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 263 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

```
GCGATTGAGT TCTCCCTGCT GGTCTTTTGT AATCACACCA AATGAATGGC TTGCTACTGT      60
TCCCTCACAC CTTTCATATTG TCCATGGTTT TTCCACCTC CTTAGCTATA CAGCTGCTGT      120
TCCTCCTGCC TAAATGTCT GAACATTCCC TCAGTGTTCA GCTCAGCCCA CATCTTACAT      180
CTTCCCTAAG GATGTTTTTC TGCTGCTATC ATTCATTTTC TTCCTATGAG TTCCTCTGTT      240
ATATTGCGCC ACCAGAACTC GAG      263
```

(2) INFORMATION FOR SEQ ID NO:307:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 267 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

```
GAATTCGGCC TTCATGGCCT AGCCCCGACT AGCTTTGCCC TAACTCCTTC ATCAAAAGAC      60
CCCCCGCCAG CTTCCACAC CTCATACGCA GCCACATCTG CCCTATTCTC CATGCTTTCC      120
AGCTTGCCCTG CCCTTCTCA TCTCTCCCTG CCTGTGCAGA CCTCCACCCT TCTTTCCTCC      180
ACCCCTCCAT CCCCCAATGC TTGTAGACCT TCCATTCATT CCGTCTCATC GTGCGTGGTC      240
TCTGATCGTC CATCACCTGA CCTCGAG      267
```

(2) INFORMATION FOR SEQ ID NO:308:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 261 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

```

GAATTCGGCC TTCATGGCCT AGCCAAAATC ACAAGAAAAA TAACTTTGAC TTTGAAAACA      60
AATAAGTTAG AAATGCAGTG TTGCACTTC GTGGTTTATG TTTGCTTTGG TGGCCTCTCA      120
TTCCCACTTA GCCTCAGTCT CCAGGGCCTG GGCTCCACCA AGGAAGACTC CATCTGCTCT      180
CTCTATTGTC ACACTGGGAA CTTTTTCCC CAAGGTACAG GATATGATTC AGGGTTTATG      240
GATGACCTCC CACCCTCGA G                                     261

```

(2) INFORMATION FOR SEQ ID NO:309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

```

GAATTCGGCT TCATGGCCTA CCTATTCCCA AACTTTAAAT GTTGTCTACC AAATACTGAC      60
AATTATGAAA ATTCTACCAG TAGAACACAC CTCCTCTTTG AGCTCCAGAG CACATGCTTG      120
ACATCTCATA TTAGAAAGAA TCTTGATTTC CCCTCCAGTC TAGTCTTTCA TGTTTTGTTT      180
TTCTTTGTGA GAGTCTCCCT CAGCCTGCAA TGGCGTGATC TCGGCTCACT TCAACCTCCC      240
GTGCTCGAG                                     249

```

(2) INFORMATION FOR SEQ ID NO:310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

```

GAATTTGTTT NAAAAAAAAA AAAAAAAAAA AGGGCNGGGG GGAAAAAAAA AAAAAAGAAC      60
TCCTGGAGAG GGAAATAGCA AATGTGTCTT GCCTTTTGTG GCTCTCTCTC TCTTTTTTTT      120
TCTCTCGCTC TCTTCTTTC TCTTCTTCTC TCTGTTTTTA AGTCAAGCAT TGGTCTCGAG      180

```

(2) INFORMATION FOR SEQ ID NO:311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 742 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

```

NNNNNNNNNN NNNNNNNNNN NNNNNNNANN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      60
ANNNNNNNNN NNNNNNNNNN NANNNNNNNN ANNNNNNNNA NNNANNNNAN NNNNNNNNNN      120
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNANN NNNNNNNNNN NNNNNNNNNN      180
NNNNNNANNN NNNNNNNNNN CNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NANNNNNNNN      240

```

```

NNNNNNNNNA NNNNNNNNAN NNNNNNANNN NNNNNNANAN GNANNNNNNN NNNNNNNNNN 300
NNANANANNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNC CCCCTTTGTC 360
ATNGTTNTCG TTCCCNNTCT TCCTTGTTTC TTTTTCGGCA CAATATTTCA AGNTATACCA 420
AGCATACAAT CAACTCCAAG NTCGGAATTT TAATTACTTC ATGGCCTACT TGATGCAGGC 480
TGGAATGTTA TCCCTGGGGT GTGCTTGGAC CCCACCTGCT TTCTTTCTCT CCTGCCCCCTC 540
CCCTACTCTC ACTGTAATTT ATGGACCCTG CCCGCCTGCG TGTGTGTGT ATGTCCTGTG 600
CCTTTTCTCA CTATTGTTT GGTGTGGGAG GGGGTGGTTT TCACTGAAA AGGGGGGTAC 660
ACCTATAGCT TTCTTGATGT TCAATCAATC AGTCACTGTG TCCAGACAT ATTCAATAAA 720
CACAGATTGG TACCATCTCG AG 742

```

(2) INFORMATION FOR SEQ ID NO:312:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

```

GCGATTGAAT TCTAGACCCG CCCCAGGAGC CTCCAGCTGC CTAACCAGTG CCATTCTTTC 60
ACAACACGAT TTTCTACAAA TCTACAGCAC AACCGAGTTT GTAACCCGTG GGTAGTATG 120
AGGACCGGGT TCGTGACTC TCTGTATCTC CTCTTAAGCT TCGTCCAGGG TTCTTTATTT 180
TTGTCTGCTG CCAATGTCGT CTCGCATGCC TGCACCCTCG CATGCACGCT GCCCGCATGC 240
CACGTGCCAC GCTGTAGCCA CATCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:313:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

```

GAATTCGGCC TTCATGGCCT AGTTGATGTC CTCTCATATT TTGTTGTTTA AATACGCAGT 60
GTGGTGGTTG TTATTTAGGA CTGCCTCTGC TCTGACAGAT GTGTCTACTC TACAGAGAGA 120
GAGAGAGACT GTGTCTATTG TCCCACCAGG CTGTCCAGAT CCAAACCTCA ATGACCTTTC 180
TGCACTCTGC CTGGCTATTG GTTACAGTTT ACATTCTACC TTCTCCCAAG GTATTGAGGG 240
AGGCTTGCAT GCAATTCTCG AG 262

```

(2) INFORMATION FOR SEQ ID NO:314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCTAGA CCTGCCTCTC CTGACACGGG CCACCAAACC CCTTACCTGG TTCCTTGCTG 60

```

```

TAAAACTTCA CCAAATGAAG CCAGAGTTGA TCATGACCCT CTCGTGCTCG AATCCCTTCT 120
GGGCTCCCTT CTGCCCCCTG CAAAGCCCAC ATGATACCAC AGAGAAGACC TGTCCCTGTC 180
AGGCCAGCTG CTTCAGCCTC TTCCCTCACA CACATCGTCC CGCACACGGC AGCCACCATG 240
GACTCAACAT CCCCACACA CCGTGCTGCC CTCTGCATGC ACCGACCCCC TGCCCCTCCC 300
ACGAGCTCGA G 311

```

(2) INFORMATION FOR SEQ ID NO:315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

```

GAATTCGGCC TTCATGGCCT ACCTAGGTGC TTTTAAAAAT ATTCAGACAA ATATCTATCT 60
TACATTGATT AAACCCGTGT AAATTCATTT GCAGTATCTA CATCGAATGT CAAAAAAGTA 120
TACTTATTTT TGTTCATAC TTATGTACAA TTTTTCCTT CTCAGGCTT TTTCATTAC 180
CTTTTTGAAA AAGCACTTAC TCTCCCTTC CCTATCACCC CATCCCTCG AG 232

```

(2) INFORMATION FOR SEQ ID NO:316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

```

GAATTCGGCC TTCATGGCCT ACAGTTGTTT AACTTCCTT TACAAATATA AAGATAGCTG 60
TTTAGGATAT TTTGTTACAT TTTTGTAAT TTTTGAAATG CTAGTAATGT GTTTTCACCA 120
GCAAGTATTT GTTGCAAACT TAATGTCATT TTCCTTAAGA TGGTTACAGC TATGTAACCT 180
GTATTATTCT GGACGGACAC TCGAG 205

```

(2) INFORMATION FOR SEQ ID NO:317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

```

GAATTCGGCC TTCATGGCCT AGGGCTTGTC TTTTTCATTG TTGAGTTGCA GGAGTTCTTT 60
ACATATTCTG GATACTAGAC CCTCATCAGA TATGGTTTTA AAATACTTTC TCTCATTCTT 120
TTCATTTTCA AGTATCCCTT TGATGCACAC ACCCAAAAAA GCAAATAGTG TCCAATTGCA 180
TTCTTTGATG AAGAAGAATA CAAGCAGTAA GTCAATTACA GCCTATTTT TTCTTTCTT 240
TCTTTCTCTT TCTCTCTCTC TCTTTCTTTC TTTGAGGCAG GTAGGCCATG AAGGCCGAA 299

```

(2) INFORMATION FOR SEQ ID NO:318:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 95 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

```
GAATTCTAGA CCTGCCTCGA GCTCCAGCTG CCAACACCCT TGGACACAAT ATTCCAGTCT    60
CCACTGCCCA TCTCATGTGG TTCAGGTTCC TCGAG                                95
```

(2) INFORMATION FOR SEQ ID NO:319:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

```
GATGCTTGGC TCACTCCCCG CTACTGGCCC CCAGACTTTT CCACCCAGG AAATGTCTCC    60
CCTGCCTGCA GCTTCAGCGA AAGCCCAGGA GGCAGGCCAA TCACTTGAG              109
```

(2) INFORMATION FOR SEQ ID NO:320:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 253 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

```
GAATTCGGCC TTCATGGCCT ACACATTCTT GTACCTGGAA AAAAAATGTA TCTTATTTTT    60
GATAATGGCT CTTAAATCTT TAAACACACA CACAAAATCG TTCTTTACTT TCATTTTGAT    120
TCTTTTAAAT CTGTCTAGTT GTAAGTCTAA TATGATGCAT TTTAAGATGG AGTCCCTCCC    180
TCCTACTTCC CTCACTCCCT TTCTCCTTGT CTTATTTTTC CTACCTTCCC TTCCTCTTGT    240
CTCCCCACTC GAG                                                         253
```

(2) INFORMATION FOR SEQ ID NO:321:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 334 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

```

GAATTCGGCC TTCATGGCCT AGGTGTGAAG TGATTTTATT TTTTCTTTTC TATTTTCCAG      60
TGTTTCTGTA ATGCTTTCAT ATTTCTTTTG GTAGTTAGAA AATAAAGGCT AATTTTAAAA      120
AAGAATATCA TAGTCTAAAA AATTAAAGGA TGCATAGAGT TCCCTCTTGA CTATGTGACA      180
TCTAAACTGA ATGAAGTGTG TCGGTGGCAC AGTGGAAACAG CGCAGTCTCA GGATTCTGAC      240
AGATTTTGG ATCCCAGCTC TACCACTAAC CTTGGGCAGG ATTTTAGTCC CTCTGAGACC      300
TGCTTTCTCG ATTGAATTCT AGACCTGCCT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

```

GAATTCGGCC TTCACCTAAA TACTCCTCCT TTTGTATCAT TCAGCCTTTT GTTTTAGTTT      60
GGTAAGTTTT AAGAAATTTC AGCAGCAAAG TTGTTATTCA GTGGGCACGA TGGACTCCAA      120
ATGCCTCAAG TTATGTATAC CTGTGGAGGT CACGTACTTC CAAATTGTTT TCTTCCTCAT      180
CTTCTCCCTT TACCTGCACG CCCAGGTGCG CCAGCCGGGC CTCGAG                                     226

```

(2) INFORMATION FOR SEQ ID NO:323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 164 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

```

GAATTAAAAAT AAACAAAAGG CAGCCAAGGA TGAAAGGATT TAGTTCTAAG ATGTTTCACA      60
GTTGTGATTT GTTTATTTTA ATCCTTAGTA GTAAATTAGT ACTAGAAGGA TCAGGTATAT      120
CTTCCTTAAT TCTTCCCAGG GGAGAGAAAG TCCCATTTCT CGAG                                     164

```

(2) INFORMATION FOR SEQ ID NO:324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```

GAATTCGGCC TTCATGGCCT AAGCCTATGT TGATCTTGAA CTCCTGGGCT CAANCCNTCC      60
TCCTGTCTCG GCCTCCCAAA TTGCTGGAAT TATAAGCACA TTACACAGTG CCCAGTCTAC      120
CTACATTTTG ACAGACATAT AATATTCCAT GGCATGGTTA CATTATTGAG TTAAGAATGT      180
TCCCGGTTTT CTCTAAGATA ATGCTGCCCA TCTGTGTCTC ACTCTGGACA TGTAGAGTAC      240
CTGCAAAGAC TTGGACTGCT TGAGCAGAGG GCCTGCTTTT GTTTTTGTGT CTTCTGCCT      300
GTTGTAACCT GATGCTGCCA AATGATCCTC TTAAATGATT GTACCACCTT CCCTGCCACC      360
ACCAGATTTT AAGGATTCTC TGTACCTCCC AACACATGAT GACATCATAC ATGAAAAGTT      420

```

TTGCCTGCCT GATGGAATAA TTGAGTCAAG AAATAGGATG CTAATGGCAT CTCGCTTAC 480
CCGGTCTCCT CGAG 494

(2) INFORMATION FOR SEQ ID NO:325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

GAATTCGGCC TTCATGGCCT AGTTGGGTGT TGAGCTTGAA CGCTTTCTTA ATTGGTGGCT 60
GCTTTTAGGC CTACTATGGG TGTAAATTT TTTACTCTCT CTACAAGGT TTTTCCTAGT 120
GTCCAAAGAG CTGTTCTCTT TTGGACTAAC AGTTGTCCTG ATGAATAATT TCATTTTCCT 180
CAAGTTTATG ACACTCGGAA CGTCAAGAAC TGGAGGTTTG TGCAATTTGA GACCGGTCGG 240
CACTGTGCAG AGATCAGAGT ACTAAGAGAC AGAGATTAAA ATGGCTATCC TCGAG 295

(2) INFORMATION FOR SEQ ID NO:326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

GAATTCGGCC TTCATGGCCT ACAAGGATAG AATTCATTCC ACCTATATGT ACTTAGCAGG 60
GAGTATTGGT TTAACAGCTT TGTCTGCCAT AGCAATCAGC AGAACGCCTG TTCTCATGAA 120
CTTCATGATG AGAGGCTCTT GGGTGACAAAT TGGTGTGACC TTTGCAGCCA TGGTTGGAGC 180
TGGAATGCTG GTACGATCAA TACCATATGA CCAGAGCCCA GGCCCAAAGC ATCTTGCTTG 240
GTTGCTACAT TCTGGTGTGA TGGGTGCACT GGTGGCTCCT CTGACAATAT TAGGGGGTCC 300
TCTTCTCATC AGAGCTGCAT GGTACACAGC TGGCATTGTG GGAGGCCTCT CCACTGTGGC 360
CATGTGTGCG CCCAGTGAAG AGTTTCTGAA CATGGGTGCA CCCCAGGGAG TGCTCGAG 418

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 588 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

GAATTCGGCC TTCATGGCCT ACAGACATCT AATCGGAATC TTGCTCTTGT TGCCAGGCT 60
GGAGTGTAAT GGCACAATCT CGGCTTACTG CAACCTCTGC CTCCTGGATT CAAGTGATTC 120
TCCTGCCTCA GCCTCCAAG TANTCTGGAT TACAGCCCTG AAAACCACTC GCTTGCAAG 180
CGCTGGATCA GCAATGCCTA CTAGTTCTTC ATTCAAACAC CGGATTAAAG AGCAGGAAGA 240
CTACATCCGA GATTGGACTG CTCATCGAGA AGAGATAGCC AGGATCAGCC AAGATCTTGC 300
TCTCATTGCT CGGGAGATCA ACGATGTAGC AGGAGAGATA GATTCACTGA CTTCATCAGG 360

```

CACTGCCCCT AGTACCACAG TAAGCACTGC TGCCACCACC CCTGGCTCTG CCATAGACAC      420
TAGAGAAGAG TTGGTTGATC GTGTTTTTGA TGAAAGCTCA ACTTCCAAAA GATTCTCTCA      480
TTAGTTCATT CCAAAACACC AGAAGGAAAC AACGGTCGAT CTGGTGATCC AAGACCTCAA      540
GCAGCAGAGC CTCCCGATCA CTTAACAATT ACAATGCGGG AACTCGAG      588

```

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

```

GAATTCGGCC TTCATGGCCT ACGACTGGGG GAAATGTCTA TTCTCCTGTG TATCTCTGGG      60
CTTTTCTTGT TTTTGGCTGC CTCCTGCTCA GTTCCTCTCT TTAGGTATTT AGTAAAGCGT      120
TCATGTAATG TCATTCCTGA GGACCCAAAG TGATGCTCTT TAACATGGTG AACAAATGGTC      180
ACTATATGTT GGGCAAACAG TTCTGAGGGG CTACGCTGAG ACTGAGCTGA TTGTATGTGC      240
TGAAAATGG AACGAACTC CTGTTCTCTT TTGTTGCTAT GGACTAGATC TCGGCAAAGC      300
TTGCGTTTCT GAGCCAATAA GCCACTGGGT CGTGCGAGGT CCTCATCAA AGAGTCCATC      360
CGGACATTGA CCTGTGCCTC TCGAG      385

```

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

```

GAATTCGGCC TTCATGGCCT AGCAGTTCAC CACTGCAAAA CCACGGGGCT GCGTGAGAGT      60
ATTCATGGGA CACCGAGTGG TATCACTAGC AGCGGACTCT GCATGCTTAC TTAGAGCATA      120
AAAGGATAGC ACCCTTGGCC ATTGCCTGAC ATGAAGCTCAG TTTGGAAATT GCAGAGGTGT      180
GGAGAGCCAT GGATGGGTTT TATAATTTAT TCTAATGTAA TCTCTGTGCT AAAGGCTGTT      240
TGAAAAAAT AATGAAGTTG ATGTTGCTTA AGTTATATGC AAATGTAAAC TGGTCTTCCT      300
TCAAGATGTT TGGAATGGAA TGAATGCCCT TCCCCTGGGT ACCTCCCAAT ACCTACCCTC      360
AAAAGAGCTC CAGTAAGGCT TCCTTATCTT TCCTTGCCCT GCTTCCTACA CTGCTGCTGC      420
AGGTGTCTCT GGGTGATTGT GGGGGAAACC ACTGTGGTTA AGCACCAACA CCAAGACTCG      480
AG      482

```

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

```

GAATTCGGCC TTCATGGCCT AAGGCCTTGG TGCCCTGTGG GTGGA CTCTG GGGAGGCCAG      60
GGGCCCCAAGG CCACCTTCTA GGGCCTGAGG AGCCCTCTGA GACCTGCACA CCCACCCCAG      120
GGAGCGCCCC TCCCTCCACC TCTGTGCCCC CCCAGTGA CTCTGAACCTC TGTCTGTTTT      180
GCAGATTCAT CCGGAAGGGC CGCCAGCCAG TGGATTTCCC GGGCCCTCAG CCCTCTGGAG      240
TGTACGAGTT TTGGAGAAAC CTCTTCCTCT GTATATGCTT TTGACTTTCC TGGACTGATG      300
TAAAAATACT CTTTCTTTG ACCTGTTTAT TTTTAAGACA CGACGTGATT GTGTCAGCTT      360
ATATTTTATT GCTGAAGTAA ATTTTCAAAT GTTTTATTAG TTTTGTGGA TCTTTGTCTG      420
CTCATTTTGG AGTTTTTGTA ATTTTGATAG GTGTTCTTTT ATGCTTTGTA TTGTTTCTT      480
AATGACTTTT ACCTTAGTTT TTAACAAACC CATAGTACAG TGTACCCTCG AG              532

```

(2) INFORMATION FOR SEQ ID NO:331:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 375 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

```

GAATTCGGCC TTCATGGCCT ACATTTTGG AAAAAAAAAA ATCTACTTTG TGTATGTGTG      60
GGGTGTGGGG TGTGAGAGAT ACATTCCTTT TTNGTGTCTA AATCTCACAG TCCACATATG      120
ACTTTCCCCA CTTGAGAATT CTCTCTCATC TGTGTGGCTC CCTGCATTCT ATAAAAATAT      180
AAATAAATAA AATTTTAAAA AGTATAAAGC CGGTGCCATG AGACCCTTGG GTTGGGCAAA      240
GCCTGTGAAG TTTGAACCGG TTAACGCACG AATACAAGGG AGTGATTATT ACAAGGCCAT      300
CCCGCTTAGC ATCGGGGAAT CATTGGGGA GAGAGATTCA ATTTCATAAA GATGATTTC      360
AAGGGCTGTC TCGAG              375

```

(2) INFORMATION FOR SEQ ID NO:332:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

```

GAATTCGGCC TTCATGGCCT ACACGCGGTC AACTCTGCAG GGCTGATGAT AAACATGCCT      60
CTTCTCCTAT TGTCTTCTC CTCTCTAAAG CAAGGTCATT TCTGTGCTCG TCAGGCAGTG      120
GCAGGGGTTG GGAGGAGGAG AGAGGGAAAC ACTGTGGTCA GGCTCTGGGG AGAGTTGACT      180
ACAGTGTAGC TCTTGGATTA TTTATGAATA TTGCCCTCAG ATTTATTTTC ACTCTGCTCC      240
TTCCATTCAT ATTCCCAGAG ACAACCAAGA GCCGACTGTA GAAAAAGACT TCCAGACACC      300
TAGAATATAT ATCAATAGAC ACTGTTTAAA AGGGGAGACT CGAG              344

```

(2) INFORMATION FOR SEQ ID NO:333:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 422 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

TGGCCTAAAG	GGGGTGGGTA	CTCCGGTGGG	GTAAGGTCAG	AAGGTCCCTG	TGCAGGGAGG	60
GACTGGTCCC	TTGAGAAGGA	ACAGAGGGCA	AATCCTGAAG	AGTCCTGGAG	GCCCAATGTA	120
GACAGCAGAA	GCTGGGAGCT	GACCTAGGAG	TGATCGGGGG	CCTGATCCAG	ACAGGACAGA	180
CACAGGCTGA	CACCGGAGAG	TCCCAGGTGC	CAACATGAAC	AGTTAAGGCA	GGGGCTGACC	240
CCAAAGAAAT	CAGGGGCCCCG	CAGCTGACCC	CGGAGGGTCC	CAGGTGCCGA	CCTAGACAGC	300
AAAGGCAGGG	CTGACCCAG	AGGGTCCCGA	GCCGACCCAG	ACGACACAGG	CAGGGCTGAT	360
CCCGGAGGGC	CCCGCCCCGA	CCCGGACAGG	CAGTGAAGGC	ACAGGCAGGG	CTGACACTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:334:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

GGGAACGAAA	GATGGCGGCG	GAAACGCTGC	TGTCCAGTTT	GTTAGGACTG	CTGCTTCTGG	60
GACTCCTGTT	ACCCGCAAGT	CTGACCGGCG	GTGTGGGGAG	CCTGAACCTG	GAGGAGCTGA	120
GTGAGATGCG	TTATGGGATC	GAGATCCTGC	CGTTGCCTGT	CATGGGAGGG	CAGAGCCAAT	180
CTTCGGACGT	GGTGATTGTC	TCCTCTAAGT	ACAAACAGCG	CTATGAGTGT	CGCCTGCCAG	240
CTGGAGCTAT	TCACTTCCAG	CGTGAAAGGG	AGGAGGAAAC	ACCTGCTTAC	CAAGGGCCTG	300
GGATCCCTGA	GTTGTTGAGC	CACCTCGAG				329

(2) INFORMATION FOR SEQ ID NO:335:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

GAATTCGGCC	TTATGGCCT	AAAACAGATA	ACGCTATAGA	GAAAACACTG	TTTACTGAAC	60
AGTGCTTTGA	AACCACGAGG	GTGATCAGAG	CCCCATTTCG	CCTTCTAGAG	ATAAACCTGT	120
CTCCCTTCCT	GCAGAGCTAG	CTCCTCCTAT	TGCTTCTGGT	TGTCGTTTGT	CTTCAGTCTG	180
CTTCCTGCCA	GTGCAGCAGC	TCCTGCTAGA	TCTTGACATC	CTAGTGGCCA	GATCCCAGGG	240
GCGGTGCTGG	TCCTATCCGA	GCTCTCTGCC	TCATCTCCCA	TTCCTTTTTT	CCACACTCAG	300
TGTGTATTCT	CTTGGATTTC	CATACCCTGT	TCCTCCTACC	ATCCACCTCT	CTACCTCATC	360
TCCCGACCTG	CCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:336:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 356 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

```

GAATTCGGCC TTCATGGCCT AGCAGGTCAG GAGCCCCGGG AAGGCCCAGA GGTACTCCAA      60
AGGGGGCCCG CTGGTATCTG AAGGCCCTT GCAGTTAGTG TGTGTGTGAG CTGTGGGCAT      120
GAACATGCCA CAGGCAGACA CTGTTTAGCC AGGGTTTAA GAAACACGGA GGGTCCTGTG      180
GATCTGGAGT TCATTTGTCA GGACAGGAT GGGGACCCCT CTGAAGTATT CACTGTGGGC      240
TGAGGGGTGC TGGCCACACA ACCTCTGTGG GAGGCATCTC TTGCAGTGAA GCTGTGGTC      300
CTCAGTTCAG TGCCCACTGA GGGTAACCAG GCCCCAGCTC TGCACCCCA CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

```

GAATCTAGA CCTGCCGAG CACAATCCCG TGGACAGAGC TTAATCCATC TAACTCGTTT      60
TCAAGTGCAT GATTTTCACT TTCACTTTTC CTTTTTCCTT ATTATGTTGC TTAAGTTGTA      120
CAGTGGCAAC TGAAATGCAT TTCAGAAATA GGAGGTTTCG TCCAGCACCC TCTGCAGCCT      180
TGGTGCCTGT AGCTCTGGAC TTCCCTGGGC CTTTCCCTGT GGGAGGGGCC TGTAGACCAC      240
ATCAGGGTGG GTGGGGGTC ACTTGGCAAA AAGGGCCGAG GTCTGGTGAT GTGGTTCCCA      300
GGATCTGGAA CCTCTCCAC CCTCCTGCA GTTGGAAGTGA ATTCTTCCCT TTCATCCGAA      360
GAAACCACT TGCTGTTTCC AGCCAACCTG AG      392

```

(2) INFORMATION FOR SEQ ID NO:338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

```

GCAAGATGGC GACCGAGACG GTGGAGCTCC ATAAGCTAAA GCTTGCCGAA CTAAAGCAAG      60
AATGTCTTGC TCGTGGTTTG GAGACCAAGG GAATAAGCA AGATCTTATC CACAGACTCC      120
AGGCATATCT TGAAGAACAT GCTGAAGAGG AGGCAAATGA AGAAGATGTA CTGGGAGATG      180
AAACAGAGGA AGAAGAAACA AAGCCCATG AGCTCCCTGT CAAAGAGGAA GAACCCCTG      240
AAAAAAGTGT TGATGTGGCT CTCGAG      266

```

(2) INFORMATION FOR SEQ ID NO:339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

```

GAATTCGGCC TTCATGGCCT AAACAATGAA TAAAGCCAAG CCAGTTCCTG CCCCCGTGGA      60

```

```

GCTTGTAGTC AAGACATTGA ACAAGTGATC AGAAAGATGT TGA CTGCTGC AGCAGAGGGT 120
TGCAAGCTGC TCATGAGTAT ATAACAAGTA GCCCTAACCA AAGCATTCTC TCCCTTG GTT 180
TAATGTCCAC CCATTGAGGT GACTGCTAAA TACTAATCCA TGACTCTATC CCTTGGCATT 240
CAAAC TCACA CATCCACTTA CCTGCCTCTC CAACCTCCCT GCCTCGAG 288

```

(2) INFORMATION FOR SEQ ID NO:340:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

```

GAATTCGGCC TTCATGGCCT AGTCTCTGCC ATGTTCTAAA CTGAAAACCT CCTAGTCAAC 60
TTCACACTTT ATTCCCTGAT CCTCAATTGG TTCCCATGTC CCGTTAGTGT TTCTTGTAAG 120
CCTCTGCCAC CACCGCAGAT CGAACTCTAA TCACATCTCA CCTGAATTAT GGAAAAGTCA 180
CCTCAATTCT CTCACCCATC CCAGCCTCCA CTATGGATTA ATATGCCTAA AGCAGAGCTG 240
ACCACAACGG TGAGAAGAAT CTGAGAGGGA AGCAGCAGCA AACACAAGAG TCACTGGACA 300
TGCAATGCCTC GAG 313

```

(2) INFORMATION FOR SEQ ID NO:341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

```

GAATTCGGCC TTCATGGCCT AAGAAAAAAG GATAGACAAA TAGTATTTTT GTGATTTTAC 60
AGTAGCTTAA AACTATAGGA TTTTTTTTCC CCATTACTTT GCAACAAC TG AACTGTA ATACTTTTGA 120
CCAGTTCTCT TTCCTAAGCA TTTCTCTCCT TGAGCTATTA CCCAAATTGT CCTAGTTCTT 180
CTCTGCTTGT CCTCAGCTA TACACAGTCA CTGAGGCTCT GTGCTTGGCT TCTGTTCCCTC 240
TCTCCTCATA GGGATTCTC ATGTTGGAGT TCATCAAGCT CGAG 284

```

(2) INFORMATION FOR SEQ ID NO:342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

```

GAATTCGGCC TTCATGGCCT ACCACGATAG ACCAGCTGTA GCTCATTCCA GCCTGTACCT 60
TGGATGAGGG GTAGCCTCCC ACTGCATCCC ATCCTGAATA TCCTTTGCAA CTCCTCAAGA 120
GTGCTTATTT AAGTGTTAAT ACTTTTAAGA GAACTGCGAC GATTAATTGT GGATCTCCCC 180
CTGCCCCATG CCTGCTTGAG GGGCACCCT ACTCCAGCCC AGAAGGAAAG GGGGGCAGCT 240
CAGTGGCCCC AAGAGGGAGC TGATATCATG AGGATAACAT TGGCGGGAGG GGAGTTAACT 300

```


GGCAGGGCAC TCGAG

315

(2) INFORMATION FOR SEQ ID NO:343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

GAATTCGGCC	TTCATGGCCT	AAAGATGTTA	GATATTACAA	TTTGACTGAA	GAACAGAAGG	60
CGATCAAGGC	CAAGTATCCG	CCAGTCAATA	GGAAGTACGA	GTGTGAGAGA	TGACTTACAG	120
TCTCTTCTGT	TTCACITTTT	GGATGAATGG	CTTTATAAGT	TCAGTGCTGA	TGAATTCCTC	180
ATACCCCGGG	TGGGGAGAAG	AATTTTCATT	GTCCAAGCAC	CCTCAGGGAA	CAGAAGTCAA	240
AGCAATAACA	TATTCAGCAA	TGCAGGTCTA	TAATGAAGAG	AACCCG		286

(2) INFORMATION FOR SEQ ID NO:344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

GAATTCGGCC	TTCATGGCCT	ACCTCTGTGA	AAATTTAATT	TTTTATATCC	TGATTAATAT	60
ATTGTGACTT	TAGGCCCAT	TTTCATGTGC	TTCACITTTG	TAGAGTTAAT	CCATAAAATT	120
GCTCTTTACT	TTAGCTTATC	AAATGAAGTA	TTATTTTGTG	GACTGGAGGC	CAAAAAGTCA	180
ATGTGAGCTT	CTCACAGGTT	TTTAAAGCTC	CACTAAAAAT	AATTATCCAC	TTGTCTTTAC	240
TTTTGTTGAC	CAGAATAGTT	GGTAACTCTG	CCAGAGCCTG	TACTTACCTG	CCAAAAACAA	300
TTAAATCTGG	TTAATGCCTG	AAACCAAATC	TCTCAGTCTC	AAGTGTTATA	CTATCCAAGT	360
TTTAAATGGA	AAGGTAAACT	GTGGAGTAAT	GAAATTTTGG	TTTTACTGTA	CCTTTTGCTA	420
TCAAGATAAT	ATTTCATGTT	GAAATCTTGT	CTTTATTTGG	AATTTAGTTA	CTGTCTGCTT	480
TTAACCTTTG	CTTTCCTAAA	GAAAGTTTGA	GATCCAGAGA	GTTCAAGGGA	TCGGGGAGTC	540
TCGAG						545

(2) INFORMATION FOR SEQ ID NO:345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

GAATTCGGCC	TTCATGGCCT	ACAATAAGTG	TGTTATACTT	GCTTTGGTGA	TGCAATCAG	60
CATGGGATTT	GGCCATTTCT	ATGGCACAAT	TCAGATTCAG	AAGCGTCAAC	AGTTAGTCAG	120
AAAGATACAT	GAAGATGAAT	TGAATGATAT	GAAGGATTAT	CTTTCCCAGT	GTCAACAGGA	180
ACAAGAATCT	TTTATAGATT	ATAAGTCATT	GAAAGAAAAT	CTTGCAAGGT	GTGGACACT	240

TACTGAAGCA GAGAAGATGT CCTTTGAAAC TCAGAAAACG AACCTTGCTA CAGAACTCGA 300
G 301

(2) INFORMATION FOR SEQ ID NO:346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

GAATTCGGCC TTCATGGCCT ACACATTTTG ACAGCTTCCT TTCAGGTTTC TTGAGCTCTC 60
AGAAAAATTA GAAGGAAGTG GGCTGGGGAT ATAGAGAGAG TCCAACTAC CAACTAATGA 120
ATGAATCTGA AGGAGACACA GAAGGGCAAG TAGAGTTTAG AGTTTGAGAG TGCAGGAAAG 180
TTTTGAAATG GTCAGAACTG CCAGAGTAAT TTCTGAGATC TTAATAAGCA CTCTCCACC 240
GTTTGCCTTA AAGATACCCC TTCCCCCAA TTGAAACATC ACAAATCTGC AGAGCTCTTT 300
AATCAGGTGT GTTATACACA ATGAATTTAA TTCTTTATT GCCCTGGAAG AAAGATAAAC 360
CAGATGTGGC CCTTGCCCTT TTTCAGTAAG TATTTGTTAG ATCTTCATTA CATTTTAGGC 420
CTCCTAGGCC ATGAAGGCCG GCCTTCA 447

(2) INFORMATION FOR SEQ ID NO:347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GAATTCGGCC TTCATGGCCT AAAATTCGGC TGATTTCCCC CTTGGCTAGC CCAGCTGACG 60
GAGTCAAGAG CAAACCAAGA AAAACTACAG AAGTGACAGG AACAGGTCTT GGAAGGAACA 120
GAAAGAACT GTCTTCTAT CCAAAGCAAA TTTTACGCAG AAAAATGCTG TAATTTCTTG 180
GGAAGATTTT AATGTACACC TATTTGTAAA GTCATCAGAA TAGTGTGGAT TATTAATAT 240
CTAGTTTGA AGAAAATAAT TTATATAAAT TATTGTAAAT TTTTATGTAA ACTCGAG 297

(2) INFORMATION FOR SEQ ID NO:348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC TTCATGGCCT AGAATAAAAC AAAGCCTTTT CTGCCTTTTA CATTCAGTTC 60
AGTAACCGTC AACACCCAC CCATATACTC CCATACCATG AGGTGTAATT TTCAAACCTC 120
TCGCATACTT TTAATTACTA GTTTAATTAT TTGCCTTCTC ACTGAGTCTA TAATCTCACT 180
TAGGGTAAGA ACAGAACTCA ATTACAGATG CTCAGTAAAC ACTGGAAGGC CGCGGCTCGA 240
G 241

(2) INFORMATION FOR SEQ ID NO:349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

```

GAATTCGGCC TTCATGGCCT AGGGCTGCCC AAGATTGTGA AAGGTAAGTA GTATCTTTAT      60
TTGGGGGTAA CTTAATTATA GATAAAAGAT GGTCCAATAC TGGAAACTGT TCGTTTCTTC      120
CCTTGATCT AGTCTTCTTC TGCTTTATAT AGAATCCCAC CATCATCTCG AG                  172

```

(2) INFORMATION FOR SEQ ID NO:350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

```

GAATTCGGCC TTCATGGCCT ACACGTGACA GCCTTTCCTT TTTTCAGATCA CCTTCCTCAC      60
ACTGATGGTC TCATACAACA TCATTTTGAA TGTCTCAGC TCTCTGCACC ACCCACCCTAA      120
CTCCACTCTG GGCCACCGCT GGTGTATCCA AGATCAGGAC ACCAGTCCCT GGCACCCAGG      180
GAGTATGCTG GCCACTGAAG CAGCTTCGTT TTTCCGGCAC CCATGTGTGA AAATCGACTC      240
CCCCAACTC GAG                                  253

```

(2) INFORMATION FOR SEQ ID NO:351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

```

GAATTCGGCC TTCATGGCCT AGAAAGTTTA AAGATTAGCG TACTGATTAT GATGGGATTT      60
TACTGAAAA TTAGTTTTGT CAGGCTGCTT GCTTGTCTGT GTATTTTCTA TTCTAATTTA      120
GTTTTTATTT TTATCAAAGC TGTATTACT TATAATGTAA AAAGTCAATT AGTTTTCCAA      180
GGCTTATTAT GGAAAACAGT AGTTCCCCAG GCTCCCATCC CTATGTCCAA CAAACTCGAG      240

```

(2) INFORMATION FOR SEQ ID NO:352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

```
GAATTCGGCC TTCATGGCCT AGACCTGCCT CTAAGCCTTT GATTATTCAG CTGCCACTGC      60
CTACAGGCCT TCTCCCATAT TCCTTCCTTC TTGCTAAGTC TGACTTAAAC TAGGCTTAGG      120
CACCAACTCC TATAGGAAGC CTTCCTTGAA CCTGGCCCTC TACTTTTCAC TCACTGACTA      180
CCACTCAATT AACTGAACGG TGAAAAGTAA CCCACAGCTA CGCATTATG CAGACAACAG      240
AATTTTACTA CTTCTTCTCA CTACTGGTTC ATATTTCTGC AACCAGAAAA TATCATTTC      300
TCCCTAGTAA CTATGGCTTC CATCTGTTAC TTCC      334
```

(2) INFORMATION FOR SEQ ID NO:353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 92 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

```
GAATTCGGCC TTCATGGCCT AATAATGACT TGTTGGTTGA TTGTAGATAT TGGGCTGTTA      60
ATTGTCAGTT CAGTAGGCCA TGAAGGCCGA AG      92
```

(2) INFORMATION FOR SEQ ID NO:354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

```
GAATTCAGTT CCTTATATAT TCTAGTTATT AATCCCTTAT CAGGTGGATA GTTGCAGAT      60
ATCTTCTCCC ATTCTTTAGG TTGTCTCTTC ACTCTGTTGA TCGTTTCCTT TGCTCTGCAA      120
AAGCTTTGTA GCTTGAGATA ATCCCATTTG TCTGTTTTTG CTTTTGTGTC CTATGCTTTT      180
GAGGTCTTAC TCAAAAAATT TTTGCCCAAG CCAGTACCCT TGAAGCATTG CCCCAATGGT      240
TTTTTTTTTT AGTCATTTC TAGTTCAGGT CTTACTCGAG      280
```

(2) INFORMATION FOR SEQ ID NO:355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

```
GAATTCGGCC TCCATGGCCT ACATAGATGG GCACACTCAC ACACAGAAGT GTGCTTGTAC      60
AATCACCACA CACGCACAAA CACACACACA CACTAAAAAT ATAAACACA TGCGTCACAT      120
```

```

GGGCATTTC A GATGATCAGC TCTGTATCTG GTTAAGTCGG TTGCTGGGAT GCACCCCTGCA 180
CTAGAGCTGA AAGGAAATTG GACCTCCATG CAGCCCTGAC AGGTTGTGGG CCCGGGCCCT 240
CCCTTTGTGC TTTGTATCTG CAGCTCTTGC GCCTTTTATA AGTCCATCCT AGTCCCTGCT 300
GGATGGCAGG GGGCTGGATG GGGGGCAGGA CTAATACTGA GTGATTGCAG AGTGCTTTAT 360
GAATTCACCT TATTTTATCG AAACCCATTG GACTCGAG 398

```

(2) INFORMATION FOR SEQ ID NO:356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

```

GTGTCAGAGC AGGCATTTC CAACCTAAGG AAATCTTTGT TTTCAAATAT TAGGGTTTTT 60
TTTTAATTGT GGTAAAGGA TTTTGGACAT GCTTTGTAAA TTGTTAGTAA AAGGACCTAT 120
TTTCCACCTG TATTCTAAGT TATTTTTTTC CCTCTTTTTC AATTTTTCAG GTCAGCCCTT 180
CATAAACCCA GATGGGAGTC CAGTTGTGTA TAATCCTCCT ATGACTCAAC AACCAGTTAG 240
ATCCCAAGTG CCTGGACCTC CACAGCCACC TCTGCCAGCC CCACCTCAAC AACCAGCAGC 300
TAATCACATT TTCTCACAGG CGCATCTCGA G 331

```

(2) INFORMATION FOR SEQ ID NO:357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

```

GCTGCCTCGA GGTCTCCAAG ACTTTTTCAT CTCGTATCGT TTCGGGATCC GTATCCATAC 60
TTTTATTTTC ACTTTCTTCC TCTTCTCCT CGAACTCCTC GTCGCCATCC TGTCTGCCCA 120
GCTTCCCGTA GCCATCCTCG CCTTCTTTCT CGTGCTCCTT CTCGCTCTCG CCATCCCTCG 180
GCATACTCTC CCTCTTCTC TCGAG 205

```

(2) INFORMATION FOR SEQ ID NO:358:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

```

CAAAAGAGAT GGTACCAGCA AGAGATTAAT ACTAAAGAAA TGCAGTCAGA TTTTAAAGAA 60
ACTGGAAGAA GAGCCATTTC TCCAGGGAG AAGATTCTAG ATGTGATTGA TGACACCATA 120
GAAATGGAGA CAGGTCTGAA AGCAATGGGA AGAGAGATTG GTCTAAGGGA GAAGACGCCA 180
GAGGTGATTG ATGCCACTGA GGAAATAGAC AAAGATTTGG AAGAAGCTGG AAGAAGAGAA 240
ATATCCCCAC AGAAAAATGG CCCAGAGGAG GTTAAGCCTC TAGGTGAAGT GGAGACAGAT 300

```

TTGAAAGCAA	CTGGATATGA	GAGTTCCCCA	AGGGAGAAGA	CACCAGAGGT	GA CTGATGCC	360
ACTGAGGAAA	TAGACAAAAA	TTTGAAGAA	ACTGGAAGAA	GAAAAATATC	CCCAAGGGAA	420
AATGGCCCCAG	AGGAGGTCAA	GCCTGTAGAT	GAAATGGAGA	CAGATTTGAA	CGCAACTGGA	480
AGAGAGAGTT	CTCCAAGGGA	GAAGACACCA	GAGGTGATTG	ATGCTACTGA	GGAAATAGAT	540
TTGGAAGAAA	CTGAAAGAGA	AGTATCCCCA	CAGGAAAAC	CGAG		584

(2) INFORMATION FOR SEQ ID NO:359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

GAATTCGGCC	TTCATGGCCT	ATGCTTCTG	AATTGGCAAG	ATATTCCAGG	CTTATTGGC	60
ATTCATCTTA	CTCTAGACCT	ATTATCAACC	ATGTCTCCAA	GGATAAGTAA	ATCCTTTTAA	120
GGGAAAATGG	TATTTTGAAA	GCATAGTGTG	GGATCTGAGG	ATACCTATTC	CTGTCAGGTT	180
GGTTATTGTT	TGTTTTCACT	GAGTAGATCT	TGGACTTTAT	TAATTTTATT	TATTTATTTT	240
AAGAAAAGTA	CATCATGAGT	TATAAGTAAT	AATCCAAC	CAAATTTTAA	TATTGCTTAA	300
CTCTTTTGAT	TTTATATTTA	TCTTTTACAC	TGAAAAGTCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

GCGGGTGGAC	AAAAATGAAG	CCAATGAAGA	AGGCATGCAC	TGGCCTTTCA	GGTCCTGGCA	60
GTGGCAGCAA	GTCCCCCCCA	GCCACCAGGG	CCAAGGCTCT	GAGGCGGCGA	GGGGCTGGGG	120
AGGGTGACAA	GCCAGAGGAG	GAGGATGACG	AGGCACAGCA	GCCGCAACCA	CAGTCCGGGC	180
CCGAAGAGGC	TGAGGAAGGG	GAGGAGGAGG	AGGCTGAGCG	GGGCCCTGGG	GCTGAAGGTC	240
CTCCACTGGA	GCTGCACCCT	GGCGACCCGG	CTCCAGGCCC	AGCAGAGGAC	CCCAAAGGGG	300
ATGGGGAGGC	AGGCCGCTGG	GAGCCCTCAC	TCAGCCGCAA	GACAGCCCCG	TTCAGTCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

GCACCACCTC	TTGCACTGTG	AGGAGTTTAT	TGATGAATTC	AATGGGCTGC	ACATGTCCAA	60
GGACAAGAGG	ATCAAGTCAG	GGAAGCAGTC	CAGTACCTCC	AAGCTGCTGC	GTGACAGTCG	120

```

AGGCCCCGTCG GTTGAGAAAC TGTCCCACAG ACCTTCAGAT CCTGGAAAGA GCAAGGGGAC      180
CTCCCATAAA  CGGAAGCGAA TTAACCTCC  CCTGGCCAAG CCAAAAAAAG GGTATTCAGG      240
CAAGCCCTCT  TCAGGAGGTG ACAGGGCCAC CAAGACGGTG TCTTACAGGA CTACCCCCAG      300
TGGTTTGCAA  ATAATGCCCC TGAAAAAGTC TCAGAACGGG ATGGAATG GGGACGCCG      360
CTCTGTAAGG  ACCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

```

GATTGTATTG AAAGTCAGAC ATAGGTGTGG AACCAGTTAT GGGAGTGAGG ATAAGTCTAG      60
ATTTGGGAAT CAGTCGCAGA GAGGTGGACG ATGAAAGTCT GAGAAAGAAAG GATCTTGCTA      120
ATGGAGTGAA CTCAGAGCTT GATAAAGGGA GGATGAGTGG AAATGGAGCT CAACGCTGTG      180
CCTTGGGAAA TACCTCTGTG GATTGGTGGG AGCACAGTGA GAAATTCAAG AAAGACACAG      240
ACAATGGAAT AACCAGAGAA CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```

GAATTCTAGA CCTGCCTCGA GCATTGCCCC CGGCCTAAGA AGCTCTCTTA TCTTGCATCT      60
TGGGCTGGAC TCCTACAACA GCCACAATT CCGTGCTGGT CTCCAGCTT CTAGCCTTCC      120
CCCATCTCCT GTCGTTTTTC ACACAGCAGC CAGAAGGATC CTTTAAAAAC AGAGGTTGAT      180
CCTGTCGTTT CTCAAAATCC TCCAATGCTT TTCCTACTGC ACTCAGAGTA AAAGCCAGTC      240
TCTGCCTTAG ATGCTCTGGG ATCCTGTACC CTCTTTGGTC TCATGTCCTA CAATCTGCAT      300
TCTGGCCATA ATGGTCTTCT CTGCTGTTCC TTGAACATTC CAGGAACATT CCCCCCATAC      360
CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```

GAATTCGGCC TTCATGGCCT ACTGGGTTCT GAGAAGCAGT GGCCCCAGCT GAAGCATCCA      60
GACAATGAGT GTTCAGAAGC TGCCAGATTC TCACCTAGCC TTAGAAGTAA CACAGCCACA      120
TTCTGTGGT TACAAACACA TTTCTAAGGC CAGTCCAGAT TCAAACGGAG GGCAATTAGA      180

```

```

TTTGACCCCT TGATGAAGGA GGGCAAGGTT ACACTGAAAA ACAGCATAGG GACTGGGAGA      240
TATTATGATG TCCATTTTGG GAAAATCTGC CACAGACACA GTGAAGACAG AGAGCCCTTC      300
TCTCTGATCG AGGACCTCCA GAATGATCTG CTGAGTCACT CAGGTATGCT GGACCATTCA      360
CACTCACCCC GGAAAAGCTC GAG                                              383

```

(2) INFORMATION FOR SEQ ID NO:365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

```

GAGGTTTACA GGTTTAAGCA TTTGTTTTTA CAAAAAGGAA TGGGATATGG GGGTGGTCAA      60
GTTTTACGGG TAATAACAAC ATTCTCTCTA GATGGCAGGG GGTAAGTCTG CCTGTCCTCC      120
ATTGCTGGTA CCACATAAGG GATACATTAG TAAAGTAGGG AAAGGGTCAT ATGTGTGGTT      180
GACCTGTTCT TCAGAGAGGA ACGTGGGATG GTATCTGCTG TGTACCTGTC TCAGACCAAA      240
CCTGGGGGTG GACCAAGTGC CCTTTCTTCT CAGCCTTCTT CCACAGCCTG ACTGTACTGC      300
CACCCGCACC CATGAGAAGG AGGTNNTGAA GGAAGCTTGA GGACATCCAC CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

```

GAATTCGGCC TTCATGGCCT ACAACCATG AAAAAATATA GACTTAGAAA ACGAAAGTTC      60
CCCTTAATCA CAAAGAACCA CAGTTGACAG GGTGATAGA TGTTTTTCA GATTTTTTTT      120
TTCATATGTC TGCTATCTTT CCCACAGGA ACTGGGTTT ATTTAGGTG TTGTTTGGCA      180
ACCTCTGTTT TTCAGTTGCC AGTTTATCTC AGACATTGTC CTATGTCAGT ACAGGCCCAT      240
CTCGAG                                              246

```

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

```

GAATTCGGCC TTCATGGCCT AAAAAAACC AACTTTCCAG TGGCTTCTCA CTGCTCTGAG      60
AATAAACTCC AGGCTCTTCC ATTGCAACCA ACAGGATCTG GTGATTCGAC CCCAGCCCTT      120
CTTTCCAGGC CCTCATCACC TTGATCCTCC CTTAACCTAT CCTGCTCCAG CTGCACTGGC      180
TGCCTTCCTA TTCCTCCAGC ATACCAAGAT TGTTCTGCC ACAGGGCCGC CACTCGAG      238

```


(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

```

GAATTCGGCC TTCATGGCCT AGTTTTTCT ACTCCTACAA GTGTAAATTG AAAAATCTTT      60
ATATTAAAAA AGTAAACTGT TATGAAGCTG CTATGTACTA ATAATACTTT GCTTGCCAAA      120
GTGTTTGGGT TTTGTTGTTG TTTGTTTGTT TGTTTGTGTT TGGTTCATGA ACAACAGTGT      180
CTAGAAACCC ATTTTGAAAG TGGAAAATTA TTAAGTCACC TATCACTCGA G                231

```

(2) INFORMATION FOR SEQ ID NO:369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

```

GAATTCGGCC TTCATGGCCT ACTTGGTCTT CTGCACTTTT GTCTCTGACG TACTTCCTTT      60
CTTCACAAGT GCCATTACA GAAAGCTGGG CTTAAACCAT TCCCAGCTAT TCCTCCTACA      120
GCTTTCCTGA ATTATTTCAG AATACAAAAT TCTGTATCTC CAAGAACTA TTACAGATTT      180
AGATTTAAAA ATATGCACTA TTTTCTACCT TGTATGTTTT GCTTACTATT TTTTTTTTGC      240
AGAGGATATG TCTTAAAAAT TGAAATGCAT CAAAAAT                277

```

(2) INFORMATION FOR SEQ ID NO:370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

```

GAATTCGGCC TTCATGGCCT ACCAAGTCAA AAAATAGAAC AGTTCCGGCA CCCCAGAAGC      60
CCTTTGCCAC GTGGTCACAA CCCTCCCTGT TTCCACCAAC AGTAACATTC TAGTTTTTAC      120
AGTAATTCTC TCCTTGCTTT TCTTTGTAAT TTTACTGCCC TGTGTTTCTT AATATGATTT      180
AGTTTTGCCT GGTTTGCCT TCATATAAAT GAAATCATAC TGAATATATT ATTTTCATATT      240
TTGCCAATA TTTTGTGTTG AAGATTCATC CATCTGTAG CTCCAATGTA TTTATTTTCA      300
TTTTTGATATA ATTATATGAT TATGCCACAG TTTGTCAGTT CACTCGAG                348

```

(2) INFORMATION FOR SEQ ID NO:371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

GAATTCGGCC	TTCATGGCCT	AGAATTATTA	GGAAACAAAT	GGTTTTGCTG	TCTTTTGGTC	60
ATTAGCTTGG	CCCCATGTTT	AAGCATTTCG	TAACAACTGT	GAAGAGCCTG	CTACAAATAA	120
AGTGGTAGGT	GCTCTGAAGA	AAAATAAAGC	TGTTAAAGGG	AATAGAAAGT	GATGAAGGCA	180
GGGGCTGTTA	GACAGGCTGG	TCAGTGTCTG	AGGAAGTAGC	CCTGCACTGA	GACCTGAAAA	240
GTAAAGAAGC	AAGCCATGGG	GAGTTGGGGA	GGAGCATTCC	AGACAGAGGC	TTGATGTGTT	300
GAACCATCTT	TTCCAAGCTC	TTCTCTGTT	ACCTTCTCTT	TAGTCACTAT	GTCCCTTTTC	360
TATCCAGAC	CATAATTCCA	CCATTTATCT	TAAGGCTGAG			400

(2) INFORMATION FOR SEQ ID NO:372:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 268 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

GAACGATTGA	ATTCTAGACC	TGCCTCGAGA	TCAGCACTAA	CCCCCCCAAC	TCCCAGCCTT	60
TAGTTTGCTG	TAGGCTGTCA	AACCAGATAA	CCAAACTTGT	TAAATTGAGA	ATCAATAGGC	120
TGTACATAGG	GACTACAACA	GAATGACGCT	CATTATTGAC	AGAATCAAGT	TCAAACCTCT	180
TGTCCTGGCG	TCTGTTGGCC	TCTGGCAGCT	GGCTCATCTG	GCATTAGCTG	GTTGCACGAG	240
TTGCTGCAAC	CCTCCACCCC	CGCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:373:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 463 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

GTGAGGTTTT	AAC TGAGCTC	GAAGAATTGG	AATCAAAAGA	GATAGGTTTG	TCTCAGTCCA	60
GACAGTGGAT	AGCATAAGGA	AAGTACAAC	GCAGAAAAGA	GGGGGACAGC	GAAGAGACTG	120
GATTGATGCG	TTATCTAGGC	GGTACCTGTC	TCCATTCTTT	TCTAGCCAGC	CTTTGAGCAT	180
TTCATCAAGA	ATAGAGGAAT	TCAAAGTACT	GCAGTCTGCT	TGAACCAAGT	CTTGTGAGTG	240
GCTCTAAAAA	AAATACTTGA	ATTTGAACTT	GAAAGAACAC	TCAAATAAGG	TTTGGGGCTT	300
CTCTTTGTTT	AATACTTTAA	GCGTCTTATT	TCTAACATAA	ATATACTGAT	TGCACAGAAT	360
TTGATTGTTT	ATAGCAGCAG	TTGCCTGTAC	TTTAGAATTC	TCAGATATTA	GAGCTGAAAG	420
ATCATCTGAG	TTACTTTATA	AATGGGGAAA	TCTCGATCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:374:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 451 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

GAACGGCAGC	CATTGAAGCA	TATTGAAAA	GGAAGTGGG	AATTTATTAA	AGCACTCATG	60
AAGGAAATTC	CAGCGCTGCT	TCATCTTCCA	GTGCTGATAA	TTATGGCATT	AGCCATCCTG	120
AGTTTCTGCT	ATGGTGCTGG	AAAATCAGTT	CATGTGCTGA	GACATATAGG	CGGTCCTTGA	180
GAGAGAACCT	CCCCAGGCAC	TTCGGCCACG	GGATAGAAGA	CGGCAGGAGG	AAATTGATTA	240
TAGACCTGAT	GGTGGAGCAG	GTGATGCCGA	TTTCCATTAT	AGGGGCCAAA	TGGGCCCCAC	300
TGAGCAAGGC	CCTTATGCCA	AAACGTATGA	GGGTAGAAGA	GAGATTTTGA	GAGAGAGAGA	360
TGTTGACTTG	AGATTTTCTG	CTGGCAACAA	GAGCCCTGAA	GTGCTCCGGG	CATTTGATGT	420
ACCAGACGCA	GAGGCACGAG	AGCCCTCTGA	G			451

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 513 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

GAATTCGGCT	TCATGGCCTA	CTCAGATCTT	AAAATTCAGG	CTGTCAAAGA	GATTTGCTAT	60
GAGGTTGCTC	TCAATGACTT	CAGGCACAGT	CGGCAGGAGA	TTGAAGCCCT	GGCCATTGTC	120
AANATGAAGG	AGCTTTGTGC	CATGTNTGGC	AAGAAAGACC	CCAATGAGCG	GGACTCCTGG	180
AGGGCAGTGG	CCAGGGACGT	CTGGGATACC	GTCCGGTGTG	GGGATGAGAA	GATCGAAGAC	240
GTCATGGCCA	CTGGGAAAGG	CAGCACTGAT	GATAGTGACC	TCAAGGTTC	TATAGACAAG	300
CTGGAAGATA	TTTTGCAAGA	AGTCAAAAAG	CAAAATAACA	TGAAAGACGA	GGAGATAAAA	360
GTCTTAAGAA	ATAAAATGCT	CAAAATGGAA	AAAGTCTTGC	CACTGATCGG	ATCTCAGGAA	420
CAGAAAAGCC	CAGGAAGCCA	CAAAGCAAAG	GAGCCTGTTG	GTGCTGGTGT	TAGTAGCACC	480
TCTGAGAATA	ATGTAAGTAA	AGGAGACCTC	GAG			513

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

CAGAATGGGA	TCGAAGCCTG	CCTCCTTAGG	NTCTTTGCCN	TCATCCTCTC	TGGCAAATGC	60
AGTTACAGCC	CGGAGCCCGA	CCAGCGGAGG	ACGCTGCCCC	CAGGCTGGGT	GTCCCTGGGC	120
CGTGCGGACC	CTGAGGAAGA	GCTGAGTCTC	ACCTTTGCCC	TGAGACAGCA	GAATGTGGAA	180
AGACTCTCGG	AGCTGGTGCA	GGCTGTGTG	GATCCAGCT	CTCCTCAATA	CGGAAAATAC	240
CTGACCCTAG	AGAATGTGGC	TGATCTGGTG	AGGCCATCCC	CACTGACCCT	CCACACGCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:377:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 334 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

GAATTCGGCC	TTCATGGCCT	ACTTCATTGT	AAGGTACTTC	TTTGCGGCGC	TGACAGTGCT	60
CACGCTCCTG	GGCCTCCTCC	ATGGACTCGT	GCTGCTGCCT	GTGCTGTGT	CCATCCTGGG	120
CCCGCCGCCA	GAGGTGATAC	AGATGTACAA	GGAAAGCCCA	GAGATCCTGA	GTCCACCAGC	180
TCCACAGGGA	GGCGGGCTTA	GGTGGGGGGC	ATCCTCCTCC	CTGCCCCAGA	GCTTTGCCAG	240
AGTGACTACC	TCCATGACCG	TGGCCATCCA	CCCACCCCCC	CTGCCTGGTG	CCTACATCCA	300
TCCAGCCCCT	GATGAGCCCC	CCAGGTCCCT	CGAG			334

(2) INFORMATION FOR SEQ ID NO:378:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 305 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

GGATTTTAAG	GATCACATTTC	CAAGGGAAAC	TGATATGAAG	GTTGCAATGA	ATGTGTATGA	60
GTTATCATCA	GCTGCCGGAT	TACCTTGTGA	GATTGATCCT	GCATTGGTCG	TAGCTCTTTC	120
TTCACAAAAA	TCGAAAAACA	TTAGTCCAGA	AGAAGAGTAT	AAAATTGCCT	GCCTTCTCAT	180
GGTGTTTGTG	GCAGTTTCTT	TGCCAACACT	GGCCAGTAAT	GTGATGTCTC	AGTACAGCCC	240
TGCTATAGAA	GGGCATTGCA	ACAACATACA	TTGCTTGGCC	AAAGCCATCA	ACCAGATTGC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:379:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 329 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

GAATTCGGCC	TTCATGGCCT	ACCCAAACAT	TATCCCTCTA	CACCTGTCCCC	ACTATGCTAT	60
ACCCCTGCAC	TATACCCCTA	TGCTGTCTCC	CTTACGCTAT	CCCCCTATGC	TATGTCCCCT	120
ACACTATCCC	CCTTTGTTGT	CCCTCCATGC	TACTCCCTAC	GCTATCCAC	TACTCTATCC	180
CCCTGACGCT	GTCCCCCTAC	GCTATCCCGC	TACACTGTTC	CCCCTACACT	ATCTCCATAC	240
ACTGTCCCCC	TACACTCTCC	CCCTACTCAA	TTCCCCCTAC	ACTCTCCGCG	TACACTATCC	300
CCGCTACACT	ATCCCCCGAC	GCTCTCGAG				329

(2) INFORMATION FOR SEQ ID NO:380:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 273 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

GTTCGAATGC	TCTTTACTTC	CTTTGTGGAG	CCTCCCTGCA	CAAGCAGCAC	TTTCTTTTGC	60
CATAGCAACA	TGTGCATCAA	TAATTCTTTA	GTCTGTAATG	GTGTCCAAAA	TTGTGCATAC	120
CCTTGGGATG	AAAATCATTG	TAAAGAAAAG	AAAAAAGCAG	GAGTATTTGA	ACAAATCACT	180
AAGACTCATG	GAACAATTAT	TGGCATTACT	TCAGGGATTG	TCTTGGTCCT	TCTCATTATT	240
TCTATTTTAG	TACAAGTGAA	ACAGCATCTC	GAG			273

(2) INFORMATION FOR SEQ ID NO:381:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 338 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

GAATTCGGCC	TTCATGGCCT	ACATAACTCT	CCACAGGCTC	CCCTGGGAGG	GGTGCCCCCA	60
CCTCACCCGC	CACCTCACTT	CTCAGCCCCCT	CTTCCCATCC	AAGGGCTCCC	TGGGCTGCCC	120
CCACCCTAGT	CATGATCTCG	CTCCTCTACT	CTCTCGTAGT	ACTTTATTTT	TACCTTGCTC	180
CTGGCTCACA	TTACATGCTT	ATCTTGTTAT	TATAGATGGT	TCTACATATG	TCTCCTTTTG	240
CATCCTTTTC	TCAAAGCTCC	TGTGAGGCCA	GGGATGGTTT	TATGCCTTTT	CTCATCCCCCT	300
TATGTTCTAG	TATAATGCTT	TACACATGTT	TACTCGAG			338

(2) INFORMATION FOR SEQ ID NO:382:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 334 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

GAATTCGGCC	TTCATGGCCT	ACTTTCTCTC	CTTTTTTCCT	GTAAGTGTGC	TGGTTTTGTT	60
TTGGTCTTCC	TTCATACCCC	GTTTCTGCAT	TTCATCTTTT	CTTTCTATTG	GGACTTCATT	120
TCATTTTTTT	TTAACCTTAT	CTTTTGTTTC	TCTTGTTTAT	CCCATCCTTT	TTGATAAAAT	180
CCATCGCATG	TGTCTTCTTT	TTTCTTTTAT	TTTCTTTTCT	TTTCTTTTTC	CTTTTCTTTT	240
CTCCCAAAC	TTTCTCTTTT	CACAGCATTG	GAACACGGGA	GGTAGTCACC	CAGAAGAACT	300
TGAGCGGCCT	GGTGCCCATC	CGAGACCACT	CGAG			334

(2) INFORMATION FOR SEQ ID NO:383:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 232 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```
GCAGAAAATA TGGTATCGGT TTCATTTAAT AAAAATGAAA AAATAATTTT CAGTTATCAG      60
TAATTTCTCA GTTACACAAC CTCTGCCTTC ATTCCGCTT AGCCATGAAC TTTTACTGTC      120
ACAAAGGAAT TTAAATAGC CAAATCTAC AATCTGGCT GGGTGTGGG GCTCATGCCT      180
GGGATCTCAG TAGTATGGGA CCCCAGGCA GGTCTAGAAT TCAATCCTCG AG              232
```

(2) INFORMATION FOR SEQ ID NO:384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

```
GCCTCTGCTT TTAATTCATT GGCAACTGTT ACGATGGAAG ACCTGATTCT ACCTTGGTTC      60
CCTGAGTTCT CTGAAGCCCG GGCCATCATG CTTCCAGAG GCCTTGCCTT TGGCTATGGG      120
CTGCTTTGTC TAGGAATGGC CTATATTTC TCCAGATGG GACCTGTGCT GCAGGCAGCA      180
ATCAGCATCT TTGGCATGGT TGGGGGACCG CTGCTGGGAC TCTTCTGCCT TGAATGTTC      240
TTTCCATGTG CTAACCCTCC TGGTGCTGTT GTGGGCCTGT TGGCTGGGCT CGTCATGGCC      300
TTCTGGATTG GCATCGGGAG CATCGTGACC AGCATGGGCT TCAGCATGCC ACCCTCTCCC      360
TCTAATGGGT CCAGCTTCTC CCTGCCCACC AATCTAACCG TTGCCACTGT GACCACACTT      420
CTCGAG                                         426
```

(2) INFORMATION FOR SEQ ID NO:385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

```
GAATTCGGCC TTCATGGCCT AGGCCCTTAA ACTGGATTCA AAAAATGCTC TAAACATAGG      60
AATGGTTGAA GAGGTCTTGC AGTCTTCAGA TGAAACTAAA TCTCTAGAAG AGGCACAAGA      120
ATGGCTAAAG CAATTCATCC AAGGGCCACC GGAAGTAATT AGAGCTTTGA AAAAATCTGT      180
TTGTTCAAGC AGAGAGCTAT ATTTGGAGGA AGCATTACAG AACGAAAGAG ATCTTTTAGG      240
AACAGTTTGG GGTGGGCCTG CAAATTTAGA GGCTACCTCG AG              282
```

(2) INFORMATION FOR SEQ ID NO:386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

GATTGAATTC TAGACCTGCC TCGAAGGCCG AGAGGGAAAG TTGAAAGGTC CCAAATTCAA	60
GATGCCTGAG ATGAACATCA AAGCCCCCAA GATCTCCATG CCTGACATTG ATCTTAACCT	120
GAAAGGACCC AAAGTGAAGG GTGATATGGA TGTGTCTCTG CCAAAAGTGG AAGGTGACAT	180
GCAAGTTTCT GACTTGGATA TTAAAGGCC CAAAGTGGAT ATTAATGCC CAGATGTGGA	240
TGGACTCGAG	250

(2) INFORMATION FOR SEQ ID NO:387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

GAATTCTAGA CCCACCTCCA CCTTAACTC GAAGTAACAC TGCAAATCGT TTAATGAAAA	60
CACTCTCAAA ACTGAATTTA TGTGTTGATA AAACAGAGAA AGGAGAAAGT AGTAGTCCTT	120
CTCCATCAGC TGAAAAAGGA AAGATTCTAA ATGTTTCAGT GATTGAAGAA AGTGGCAATA	180
AAAACGATCA AAAGTCTCAA AAAATTATGA AGAAGAAAGA GTCATCTTCT ATGTTGGCTA	240
CAGTTAAAGA AGAAGTCTCT GGTACTTCAG CAGCTGTTAC GGAGAATGCT GATAGTGATA	300
GAATTTCTGA TGAAGCAAAT AGTAATTTTA ACCAAGGGCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

GGAGTAATCA GAGGTGTTCT TGTGTTGTA TAAGGGTGGC AGGAGTGGAC ATTCTTCACA	60
TACACCCATT ATTGTTTTGA AGTGTTTAAT TACCTTTTGA GCTACATTTT TGCAGCTGAG	120
TTTAGAATGA AAACCACAAG AGTTTTATG TTGGCTGTAC TCGAG	165

(2) INFORMATION FOR SEQ ID NO:389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

GAATTCGGCC TTCATGGCCT AGAACAGAGC TTACTIONTTC TTTCTGAAAC CAAGGCTTCT	60
CTAGTGAGCA CCATGAGCCT TTGGAAACAA CAGATGTATA CAATAGCAAA GTTTCATTTT	120
TTTACCTTGA AACGTGAAAG TAAATCAGTG AGATCAGTGT TGCTTCTGCT TTTAATTTTT	180
TTACACAGTT AGATTTTAT GTTTTGGTT CATCACTCTT TAAAAATGC TGTGGTTCCC	240
ATCAAACCTCG AG	252

(2) INFORMATION FOR SEQ ID NO:390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```

GAATTCGGCC TTCATGGCCT AGGATGTTCA CTTGCATGCC TCTGGATTTT AAAATTATTG      60
TTCACATGAC TCCTTTTCTG TCGTTGGGA AGCAGCTACA GAGCAGTAGA ATCCACTGAA      120
TTGGTACACT GAAGCAGGCA TGCCATTTAA ATGAAGGCAG TTAACCTTGA CTGTTGTATC      180
ACCAGAGTTA AAGAATTCTG GTGCCCCTCT TTAAGTCTTC AGGAAGTGT TAGAGGCTTA      240
TTCACATTAG TTAAACAGG CCCCCCCCAC CTTCCCCAAG GCAACAGAAA ACATAACCAT      300
TAGCTCTCTT CCTGTTTTC TTCTCATTT CATGCTTGCT TCGGCTGCTA AACTGAATTT      360
TTGTTACTTA GAATATTATA AAGTGTGGAT GCTTCTATA ATGCTATTGG TCTAAGTGTG      420
ATTAAATTTT ATTAAGGTGT ATAAGCCTCT AATTATTACA TAACTGGCAC TGGCTCGAG      479

```

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```

GAATTCGGCC TTCATGGCCT AGCCTATTAC ACAGTAAGTT AATAATTGTG TCCTTGCAAA      60
TAAGCATTGT GTTCTGAAAT GGAATCAGCA TATTTCCCTA TAAAGACACT TCCACTCATT      120
CATTAAATTGA GCAGCCCCAG TTGATAAAGA ATCAGTATAT CATGTTCTGA TATTTAATCA      180
GCAAACATCAT TTATTCAGTA GAAATTTGAA TTCCTGTGAT GTGCCAGGCT TGTGAGGAGG      240
GAGACTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```

GAATTCGGCC TTCATGGCCT AGTCGACTCC TGTGAGGTAT GGTGCTGGGT GCAGATGCAG      60
TGTGGCTCTG GATAGCACCT TATGGACAGT TGTGTCCCA AGGAAGGATG AGAATAGCTA      120
CTGAAGTCCT AAAGAGCAAG CCTAACTCAA GCCATTGGCA CACAGGCATT AGACAGAAAAG      180
CTGGAAGTTG AAATGGTGGA GTCCAACCTG CCTGGACCAG CTTAATGGTT CTGCTCCTGG      240
TAACGTTTTT ATCCATGGAT GACTTGCTTG GGTATGGAGA GTCGGCTTGA CTACACTGTG      300
TGGAGCAAGT TTAAAGAAG CAAAGGAAGT CCTCGAG                                     337

```

(2) INFORMATION FOR SEQ ID NO:393:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 216 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

GCGATTGAAC TCCTGACCTC AAGTGATCTG CCCACTTGTG CCTCCCAGAA CTGGGATAAA	60
AAAAAAAAAA ATAGATCCTT GGTATTATTC CATTACATAC GGATTGTAAA ATTCAGTTAA	120
ACATTCATCT CTTGGTGGGC ATTTATGTAT TTCTTTTGTG TGTGTGTTG CAGCATTGCT	180
CTGTAAACC TTTTATAAG TACATCTCGA CTCGAG	216

(2) INFORMATION FOR SEQ ID NO:394:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 248 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

GAATTCGGCC TTCATGGCCT ACCACATTG TAACGGAGCC ATTGAAGCAT ATTGGAAAAG	60
GAACTGGGGA ATTTATTAAA GCACTCATGA AGGAAATCC AGCGCTGCTT CATCTCCAG	120
TGCTGATAAT TATGGCATTG GCCATCCTGA GTTCTGCTA TGGTGCTGGA AAATCAGTTC	180
ATGTGCTGAG ACATATAGGC GGTCTGAGA GCGAACCTCC CCAGGCACTT CGGCCTGGGA	240
TACTCGAG	248

(2) INFORMATION FOR SEQ ID NO:395:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 238 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

GAATTCGGCC TTCATGGCCT AGCCTTCCTC TACCATTTTT AATTTTTTTA GACTTCATT	60
TGTGATTAT TGCTGCTCTG GGGGCTTCAC ATCCAATCCT TTTATGGTTT CATCTTTCCT	120
TTCTTACAT TTGTTGCATA TAACAATGGC GTGTTTAGCT ACTGCAGTGA AAAATCAATC	180
AAGCCTATTC CATATTCACA GGCTTGCAAT GGCACCAACG GCTCCTGGAT CTCTCGAG	238

(2) INFORMATION FOR SEQ ID NO:396:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 188 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

GAATTCGGCC	TTCATGGCCT	AAGTTGATCC	GGATACACAC	CTGCTAAAAC	TGCTTAAAAC	60
ATTAGAAGGA	CATGCTTATG	GCGTTTCTTA	TATTGCATGG	AGTCCAGATG	ACAACTATCT	120
TGTTGCTTGT	GGCCAGATG	ACTGCTCTGA	GCTTTGGCTT	TGGAATGTAC	AAACAGGAGT	180
CTCTCGAG						188

(2) INFORMATION FOR SEQ ID NO:397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

GAATTCGGCC	TTCATGGCCT	ACAGGCATGT	TGAGATTGG	AAAAGTGGAT	GTAAGTGA	60
TTCAGATAGC	TTTAGTGATT	GTCTTTGTGT	TGTCTGCATT	TGGAGGAGCA	ACAATGTGGG	120
ACTATACGAT	TCCTATTCTA	GAAATAAAAT	TGAAGATCCT	TCCAGTTCTT	GGATTCTAG	180
GTGGAGTAAT	ATTTTCTGT	TCAAATTATT	TCCATGTTAT	CCTCCATGGT	GGTGTGGCA	240
AGAATGGATC	CACTATAGCA	GGCACCAGTG	TCTTGTCAAC	TGGACTCCAC	ATAGGACTAA	300
TTATTATACT	GGCAATAATG	ATCTATAAAA	AGTCAGCAAC	TGATGTGTTT	GAAAAGCATC	360
CTTGTCTTTA	TATCCTAATG	TTTGGATGTG	TCTTTGCTAA	AGTCTCACA	AAATAGTGG	420
TAGCTCACAT	GACCAAAAGT	GAAGTATATC	TTCAAGACAC	TGTCTTTTGT	GGGCCAGGGC	480
TCGAG						485

(2) INFORMATION FOR SEQ ID NO:398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

GAATTCGGCC	TTCATGCCTA	GTGGATCCGG	AAACTCTGTG	GCTCTAGACT	TTCAACTATT	60
TTATTTTTC	TTTTGTATTT	TTTGTGTTT	GCTTGCTTTT	TTACAATGGG	AACTAGAATG	120
TAAGATGCCA	AACTCAGCCT	GTGGGGAACA	TGGATTTTCA	CAACAGCAAC	CACAGAGCGT	180
GGTTTCATT	TCTATTCCT	GTTTCATGTG	GAGGCAGAGA	AGGAAATCAG	GTGCTCAGTT	240
CCAGGGACAT	CACAGGACAG	GAAGTATATC				268

(2) INFORMATION FOR SEQ ID NO:399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

```

GAATTCGGCC TTCATGGCCT ACACCTCTTC TGCCAACCAG CTGCTTGGGA TGA CTGCGAT      60
CCCCGTGGCT TGTCTGGGTA TCTTCCTGGG AGGTCTTTTG GTGAAGAAGC TCAGCCTGTC      120
TGCCCTGGGG GCCATTCCGA TGGCCATGCT CGTCAACCTG GTGTCCACTG CTTGCTACGT      180
CTCCTTCTTC TTCCTGGGCT GCGACACTGG CCCTGTGGCT GGGGTTACTG TTCCCTATGG      240
AAACAGCACA GCACCTGGCT CAGCCCTGGA CCCCTACTCG CCCAAG                      286

```

(2) INFORMATION FOR SEQ ID NO:400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGATGATCAT TCTTTTCTTG CTTCTAGGCT      60
CTGTGTCCTC CTGGTTTCCT CCAACCTCTC TGGTCCTGTT TCATTGCTG TGGGTTTCCT      120
TTGCCTTTGC CACCCCTCAA ATGGGGCTTC TCACTCACAC TAGTGAGTTT TCAGTGCTTG      180
CAGACCCAAC ACCCTCTTTT TATAACAAAT ATTTTATAAT ACGTCCTTTT CCACAAC TCG      240
AG                                                                242

```

(2) INFORMATION FOR SEQ ID NO:401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

```

GAATTCGGCC TTCATGGCCT AGTCCCATCA GAGGGAGCTG ATGAAGAATG GTCCCTGTAA      60
GTAAGTCACT AGGTTCAACA ACTGCCTGGC CGAGCACTCA GCCCGTGGAG CTCAGGCCAA      120
CACCAGAGCC CCGGTTTTAG GGGCCAGGAG AGCAGGTGAC CAATTATTTG GGGAGTCTTG      180
GGTAGAATTT CCGCCACACA TTCTCCCCAG GGCTGCAGGG GTCTTCCGAG GCAGGGCGGT      240
GGAGCAGGAT TCAGGATGTG GTGGGAATAG AGTGAGGGGC AGTGGGTGGT GCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

```

GAATTCGGCC TTCATGGCCT AAAAACTAG AATAATGGAA GAGTAAATAA ACACAATTCT      60
TAATGTATTA CAAGAAATAA AAGGTTTAAA AGTAGATTTT TTAATTGAAA AGAATTAAAT      120
CAGATAAAAA TATTTGAGAG GTAATGCAAA CATTAAAGTT TGTCAAAGAA GCTTCAACAT      180
CTGGATAATA GGAAAGAAAA AAACCAAAGC AAAAGAAAAA TAAGCCACAA ACTAAAAAAT      240
GTTTAGTTCT TGAAATTTAA AAAAGTAAAT ATTGAAAGAG CATGCTGTGT ACCTGAGATT      300

```

ATTTACCCAA AACTCGAG

318

(2) INFORMATION FOR SEQ ID NO:403:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 355 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

GAATTCGGCC	TTCATGGCCT	AGATTGAATT	CTAGACCTGC	CTCGAGTCTG	GGCACCCCTGA	60
GCAGCAGCCT	GAGCCGGGCC	AAGTCTGAGC	CCTTCCGCAT	TTCTCCGGTC	AACCGCATGT	120
ATGCCATCTG	CCGCAGCTAC	CCAGGGCTGC	TGATCGTGCC	CCAGAGTGTC	CAGGACAACG	180
CCCTGCAGCG	CGTGTCCCGC	TGCTATCGCC	AGAACCGCTT	CCCCGTGGTC	TGCTGGCGCA	240
GCGGGCGGTC	CAAGGCGGTG	CTGCTGCGCT	CTGGAGGCCT	GCATGGCAAA	GGTGTCTGTCG	300
GCCTCTTCAA	GGCCAGAAC	GCACCTTCTC	CAGGCCAGTC	CCAGGCGGAC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:404:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

GAATTCGGCC	TTCATGGCCT	AGTCATGGAA	CAAGTCCTTG	CTAAACTAGA	AAACAGGACT	60
AGTATTACTG	AAACAGATGA	ACAAATGCAA	GCATATGATC	ACCTTTCATA	TGAAACACCT	120
TATGAAACCC	CACAAGATGA	GGGTTATGAT	GGTCCAGCCT	GGGTGACAGA	GCGAGACTCT	180
GTCTTATAAA	GAATAAAAAA	AAAAGAAGTG	GCAGCTCTGT	CTGCTTCTCA	CAGAGTTGCT	240
AGGGACAAC	GCTGAGGCAG	GCACCTGCCC	TTGGGCTCCC	CGGGTGGGCT	GCTATTTGCC	300
TGTGGGCTCT	GCCTGCCCCG	CTGTCCAGTC	CCCGGGGTGG	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:405:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 247 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

GCGATTGAAT	TCTAGACCTG	CCTCGAGAAC	AGGGAACCTT	CAAACAAAAG	ATATATCATA	60
GGAAGTCAGG	TGAGAAGCTG	TCAACTGGGC	AGGCAGTGAT	GAGAATCGTA	GTGTCTTAC	120
TGTACTTTTT	TGTTTTGTTC	AAAAAACCTA	AAGCATCACG	CATTTTGAAA	GCAGAGTTTG	180
CAGAGAGCCC	CCAACAGAGC	CAGAACTTGC	CAAGAGCGAC	TGATATTCT	AGAATCCAC	240
GAGGCAG						247

(2) INFORMATION FOR SEQ ID NO:406:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 442 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

GAATTCGGCC	TTCATGGCCT	ACAACATCAA	AACTCCCAAG	CAAATGGATG	AATTCATTGA	60
GATCCAAAGT	TCAACAGGAA	CCTGGTACCA	GCGCTGGCTG	GTCAGATTCA	AGACCATTTT	120
CAAGCAGGTC	TGGGATAATG	CCCTGTACTG	TGTGATGGGG	CCCTACAGAA	TGAATACACT	180
GATTCTGGCC	GTGGTTTGGT	TTGCCATGGC	ATTCAGTTAC	TATGGACTGA	CAGTTTGGTT	240
TCCTGATATG	ATCCGCTATT	TTCAAGATGA	AGAATACAAG	TCTAAAATGA	AGGTGTTTTT	300
TGGTGAGCAT	GTGTACGGCG	CCACAATCAA	CTTCACGATG	GAAAATCAGA	TCCACCAACA	360
TGGGCCTCGA	CCTGACTTTG	CCCCCTTGCC	CATCAGCCAT	TTGCCATCAC	CCCAAACAAC	420
TCAGCTTCGG	GGAAGTCTCG	AG				442

(2) INFORMATION FOR SEQ ID NO:407:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 154 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

CCGAGTGACC	TTCTTGATGC	TGGCTGTTTC	TCTCACCGTT	CCCCTGCTTG	GAGCCATGAT	60
GCTGCTGGAA	TCTCCTATAG	ATCCACAGCC	TCTCAGCTTC	AAAGAACCCC	CGCTCTTGCT	120
TGGTGTTCTG	CATCCAAATG	CGAAGCTCCT	CGAG			154

(2) INFORMATION FOR SEQ ID NO:408:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 146 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

GAATTCGGCC	TTCATGGCCT	AGTTTACTTC	TGCTTGATCT	TTATTCTTCC	TGCTACTAA	60
TTTTGGATTT	AGTTTGTCT	TTTCTAGACA	TTCATTGTTA	GATTGTTTAT	TTACAATTTT	120
TCTAGTTTTT	TTGATGTAGA	CATTTA				146

(2) INFORMATION FOR SEQ ID NO:409:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 285 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

```
GAATTCGGCC TTCATGGCCT AGATGTTGCC AGTTTTCATG GAGGAAGTAG ACATGAAAGC      60
TTGTTTGTA TGTGTTGAC AGAGTAGAAA GACATTGAAG AAGGTGATGG TATACATCAC      120
TTGAATATTT TTATTGAAAA GGGAGGGAGG AAATGGAGCG TTAGTTGTAG GACCAGATGA      180
TGTAAGAGA GTTTTTTAAA GTGTACAAA CAATGGCATG TTGTGATACT AATGAGAAGG      240
AGCCAATAGA GAACAAAAA TTGATGATGC AGGAGACGAC TCGAG                      285
```

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

```
CTCGAGGGAT CTGGCTTTCT CTGTCTTCTC ATTTACTACA TNACGCTGGT GAATTAATAG      60
ATNTCTCAAC AAAAGGACAT TTAAATCAAC ATATGACACC TGTTTAAATT CTTAAGAAGC      120
CATTAATTAC ACATTCTTAA GAAAATGAGC TATGACACAA CTCTTCTCAC TGTATAACTC      180
CTATCTGTGA TTCTCAATCA GGTGACTTTT CAGCTNCAAG ACGGATCTTT TCTATTTCATC      240
TCCTCTGGTT CGGACCAATT AAATGTNTTC TTTTGCAATC ANAACATCTC ANNTGCCAAA      300
TCTTCAAAAG CAAAGGAGTT NGTTAGCAAC ATATTAGGCC ATGAAGGCCG AATTC          355
```

(2) INFORMATION FOR SEQ ID NO:411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

```
GAATTCTAGA CCTGCCTCTG TATGTTGCTT TAGCCAGGAT TCAGAGCTAA AGTGTAAGTG      60
TGTGCTTCTG CTTTCTGGAT GTATCTCTCA AAATTGCTCT GTCTGTTTAT TCAGCTCCTG      120
GATCTACCTT CTCTTTTCTT TGAATGGAC ACCATTCATG TCATTGCTCA CTCAGAACTT      180
CAGCTGTTCT CATGATCACA TGCTTCTTTC CCTGTTTATG TCCAAT                    226
```

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

```

GAATTCGGCC TTCATGGCCT AGTCTGCTGC TTAGCTTGTA TTTTCAGTTT AATATATTCC      60
TGATCATTAA CAAAACAGCG AAGTGAATAA TGGGCATAAA TTTTCCTAAG AAGAATCATT      120
TTCCATACTT ATTTTCAAT ATTATCAAAA AGTATGTAAT TTTGGGGGGT TTTTGGTTT      180
TTTTTTTTTT TGAAACAGAA TCCTGCTCTG TTCTCGAG      218

```

(2) INFORMATION FOR SEQ ID NO:413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

```

GAATTCGGCC TTCATGGCCT ACTTTGAACA ATTCGGCATG AATTGAAACC AGGTTTTCCT      60
GTGGAAAGTT ATAGCTTGAT TGGGAGATAG AAGTTGAATT GAGTTCTTTC TTGCAACTCT      120
TAGTGTTTAT TTTTATATCT CAGTAAGACG AGGATACCTT CAGTTTGAAT CTGCATAATG      180
TTCAC TGCCA AACTCCTCT CATTTAATGC TTATGGCCTT CACATTCTG TATAATAAAG      240
ATCAATTATC AGCACTCGAG      260

```

(2) INFORMATION FOR SEQ ID NO:414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

```

GAATTCGGCC TTCATGGCCT AAGCATATGA ATTTTGGAGA GACAGACATA CAGACCATAA      60
CAGTTCTATT TTCTATAACT ATAGTAGAAT ATCGAAATGA GAACATTGAC ATTGGTAAAA      120
GGTGTATGTA TAGTTTATAT GTTATCTTAT CAAAAGGGTA GATTACAGA ACCAACACAA      180
GTAAGCTATA GAACTAGCCC ATTACCACAA AGATCTCCCA CAAGCTACAG CTTTACAGTC      240
ATACCCACCC GGCTCGAG      258

```

(2) INFORMATION FOR SEQ ID NO:415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

```

GAGGACCTTT ATAATCTACT ACTAATTACT GTGAAAGTAA ACATTGTTTA ATATACCAGT      60
TCTTAAAGAA ATATTTTGTC TAGTCATTAA TATTCTAGTT CATCTCAAAG CTTCCATTG      120
ACAATTTAAA ATTACTTAAA TTTTAATATT AAAGGAAACA GTTTTCCTGA TTCTCATGAA      180
AGTTCCTATT TGCACTGAAG ATGACTAAAC CTTTGTAGTCA TAGTTTTAGA AGAATTGGCT      240
TTTTTATAGC CATTTTATTT ACATATGGGT ACGGACTCGA G      281

```

(2) INFORMATION FOR SEQ ID NO:416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

```
GAATTCGGCC TTCATGGCCT ACTCAGAAAA GAAAATGAAA ATACCTCTAC ATGTGGTCTT      60
CCTGCTAATC TCTCTGACCT TCCTATTAC CACCCTCCCC ACTGCCCCACT TACTCGAG      118
```

(2) INFORMATION FOR SEQ ID NO:417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

```
GCGAGGATGG CATGGACGCT TATCGAGCAG CTTCAGGGTG GCAGCTACAA GAAGATTGGC      60
TACTATGACA GCACCAAGGA TGATCTTTC TGGTCCAAAA CAGATAAATG GATTGGAGGG      120
TCCCCCCCAG CTGACCAGAC CCTGGTCATC AAGACATTCC GCTTCCTGTC ACAGAAACTC      180
TTTATCTCCG TCTCAGTTCT CTCCAGCCTG GGCATTGTCC TAGCTGTTGT CTGTCTGTCC      240
TTTAACATCT ACAACTCACA TGTCCTCTC GAG                                273
```

(2) INFORMATION FOR SEQ ID NO:418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

```
GAATTCGGCC TTCATGGCCT AAGCAGTTGC TAATGCCAGC AGTACATAAA TTGAGGATGG      60
AGCAAAAGGA TCGACACCAC CAATGGCTGC ATTGTGATAG GTGTGGACAG AGCCTGCCAG      120
AATTAAACAC ACGCCAGGAC TCGAG                                145
```

(2) INFORMATION FOR SEQ ID NO:419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

GGATTCGGCC	TTCATGGCCT	AGTGTTTATA	ATTAATCCTT	TAATATTATG	GTTATTAACC	60
TCTTAAACAT	GAATGAATTC	TTGATTGTTT	TAACACAGTA	CCTAAGACTA	ATGCTTTCTG	120
TGGACACCAC	TGAGCTCTGC	CTCAACTCCA	CCCTCTGCGA	CCGGAGGACT	ATGCCCTAG	180
TAACTGCTGT	CGGTGTGGAC	GCTGTGCTGG	TTCTGTTTTC	TAAAGGAGCA	GAAGGACAGG	240
TCTCTGAGAC	AGGATCGTTG	TCCCTACAGG	AGGAACAGTG	GCCACTCGAG		290

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

GCGATTGAAT	TCTAGACCTG	CCTCGAGCCT	CCCAAAGTGC	TGTGATTACA	GGAGTGAGCT	60
GCCACGCCCA	GCCTACAAGT	TTTCTTTTAA	CTACTGCTTT	AGTCAACCAT	ATCCTCTAGC	120
TTCTGATATT	TTCAATTGTTT	GTGTGCATTT	TCTAGATATT	CAACAATTTT	AAATTAGATT	180
TTCTCTTCGA	CTAAAGTGA	AGAATTTTTT	CCCGTTTATT	TTCTACATGC	TAAAGATTTT	240
TATTTTCATT	TTGTTATTAA	TTTCTAGTGT	TACCGTATTG	TCATTAGAAA	ATATGGGCTG	300
GCTCGAG						307

(2) INFORMATION FOR SEQ ID NO:421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

GAATTCTGAA	AATATTAAGA	TTTATCCTAG	CACTTACGTT	CAACATACCA	TAATTTTAT	60
ACTTCTCCAT	CTAAATAAAA	CCAAGTTTGT	TCCTACACTA	GTCCAGCCTG	CATTCTCAAG	120
AACTCCAGTG	ATTATACATC	AACATCTAGA	GATCAGGTAT	CCCAATCCTT	TCTTCCTATA	180
TCTAAGCTAA	CTCCTTCTTA	GCCAAATGGT	ACCCTTTGAT	TTTGTGTAA	TCCTTTCCTT	240
CCCTCCACTC	TTAACCCCTC	TCATTCCATC	TTCTCCCTCC	CTTTTCCACC	CCACTCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

GAATTCGGCC	TTCATGGCCT	AGGTTAAAGT	TGTCTGGTAA	TAAGGTGGAG	TGGATTGGG	60
GCAGGTTTTA	TGTTGTGTG	CTTCTCTTAG	AAGTCAAAGA	GTGGTGAGG	TAAGTCAAT	120
CCTGTCTATA	TCAGTGTAGT	GATAATGCAC	TAGTGTAATG	AAGAATGGAG	CTGCACGTGT	180
GAGGTTTTTC	AAGTCCACAA	AGATCAGGTA	TTGTCTACGG	TCAATAAAGA	TTTTTTTAAA	240
AAACCCTCTT	AACTAAAGAG	AGGTAAGTTC	CTTTTCAAAA	CTCTGAAATT	TACATGTGCT	300
GACTTATAAT	ATGTGTGATC	CTCGCTGCTT	TTCTGATCCC	TGGTGGTTGG	GGTGTGTGTG	360
TGTGTGTGTC	TGTGTGATGG	GCTCTCGAG				389

(2) INFORMATION FOR SEQ ID NO:423:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 326 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

GAATTCGGCC	TTCATGGCCT	AATCTTAAGT	GTTTTACATG	CTCTACCTGC	CGGAATCGCC	60
TGGTCCCGGG	AGATCGGTTT	CACTACATCA	ATGGCAGTTT	ATTTTGTGAA	CATGATAGAC	120
CTACAGCTCT	CATCAATGGC	CATTTGAATT	CAC TTCAGAG	CAATCCACTA	CTGCCAGACC	180
AGAAGGTCTG	CTAAAAGGTC	AGAGTAATGC	AGAATGCGTG	CCTTCATCTC	AGATTTGTTC	240
ATCACAGGTG	GATCCCATGT	GTCTTCAGTA	GACAAGTCAC	CTTGTAGCT	AGCACCAGTG	300
CCAGTCCCAT	GCCATTGCAC	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:424:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 178 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

GCGATTGAAT	TCTAGACCTG	CCTCGAGCCA	ATCATTTTTA	AATCTAATCT	GAAC TTTAAC	60
TGGTTAGTTG	AGTGCA TTTT	TATGTGTACT	GATGTATT TG	CATTTATTCC	TTACCACCTT	120
ATTTTGTGCT	TTTTATGTTT	TTTTCTTCCA	CTCTTTT TTT	TTCTTTTGGA	ATCTCGAG	178

(2) INFORMATION FOR SEQ ID NO:425:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 127 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

GAATTCGGCC	TTCATGTACA	TAGATCTTCC	TAGTGTCA TT	GACAAAGGTG	ACATTTGCAA	60
GGCTTTTCT	TCATCAGATG	CAGGGATCTG	GACTTCATGT	GTATCCTTTT	ATCCACTCCT	120
CCTCGAG						127

(2) INFORMATION FOR SEQ ID NO:426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```

GAATTCGGCC TTCATGGCCT AGAATTTAAT TGCAGAAAAT TATTCATATT CTTATAATCC      60
TTTAAATGTC TATAGGATTT ATGATGATAT CTCCCCTTCC ATCCTGATTT TTTCAAGTTT      120
TTGTTTTTTC TTTTTTCTTA TAAATTCTGG TAAATGTTTA TTAATTTTAT TCATTTTAA      180
AAAGAACCAG CTTTGGTTT CATAAAGTTT TATAATTTT TTGTTTTCAC TTTCATTAAT      240
TCTACTCTTT ATTATTCCT TCATTTTGT TACTTTGGGT TTGTTTGGC ATTTTTTCC      300
TAGTTTCTTA AGGTGCCAGC TCGAG                                           325

```

(2) INFORMATION FOR SEQ ID NO:427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

```

GAATTCGGCC TTCATGGCCT AGGCACACAG GCGGGCAGC AACATAAACG GCACCCATTA      60
AAAAGCAAGA CTCGCTCTTG AGACTAAAGG AGAAGTTACC TAAATTTCTG TATAAACTCA      120
GTAATTCATT CACTTTACTA GTATTACATT TATGAAATTC ACCTTTGTGG AAAAAGGAGC      180
GGGAGAGGGA TAAGAAAATG CCTGTTTCTA GAAAACGCTC GAG                          223

```

(2) INFORMATION FOR SEQ ID NO:428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

```

GAATTCGGCC TTCATGGCCT AAATTCATAC AGAAGACCTT ATTGTGATAA AGTTCAACGG      60
TATAGGTAAA CAACAACAAA AAAACTATCA ACCATAATTT TTTACCCTTA CCAACATTCT      120
CTGAACCTTT CAGTAATATT TTATACACAT GTGCATATTC TGCCTTTTTC ATTTACTATA      180
TCATAAACTT CTTTCTAGAT CATTATTTT CTGCTGCATT TTTTCAGGAT TTATCACCTT      240
TATTTTGTAG TTTAGTTTTT GTGAGTGTAC TCTCGAG                               277

```

(2) INFORMATION FOR SEQ ID NO:429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

AAATGAGCCC	TATCACTGAG	AAATACGTGT	TTCATGATTT	AACTCTGTGT	GTGTGTGTGT	60
GTGTATTTTT	TTTTTGTTG	TCTTCAGCTG	ACAGTATGAA	AAATGAAACT	GCTGAAAAAG	120
CTGAGCACCT	GGTCACCCTT	GGCCTTCCAT	TGCTTTGGCC	TTCAGTAAAA	AGCAGCCTCC	180
CTTCTAGGTC	AGGGAACCAT	GCCATTGAGA	CTAGTAACGG	CGGTTCTGGG	CACAGTCCCA	240
CTGTGCACAG	GTTTGAGAGG	ACAAGTTCAT	CAGAAGGAAG	GCAGTCCTTA	GAAGTCACAT	300
ACGTTGAGCC	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:430:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 271 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

GAATTCGGCC	TTCATGGCCT	ACATTCAGAA	AACAGAAAAG	TTTCAAGAAG	CAGGAAGAAA	60
AGACTCACCT	ATGATCCCAA	CACCCAGAGG	TAATAATTTA	CCATTTTTGG	TGTATCTTCT	120
TTGTCTTTTC	CTATGTGTTG	CCTTATGTAG	ATATGTAACA	GGTTGTGGTT	TAAACCGAAG	180
CTATACCCAT	TGTTTGGAGT	CAGGCAGGTG	CGATAAATTT	GTAGGTGGCT	CACCAGAAAT	240
CTATTTGCAT	GATGAACCTA	CAGGACTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:431:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 349 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

GAATCATTTT	TGGTCACCAA	TCTCTCATAT	ACCACTACTG	GATATTTACA	ACATGCTTCA	60
GTGGAGGAGA	AGACACTGCT	GCTTTGCAAA	GATGACCTGG	AATGCCAAAA	GGTCTCTGTT	120
CCGCACTCAT	CTTATTGAG	TACTTTCTCT	AGTGTCTTCT	TTTGCTATGT	TTTGTTTTTT	180
CAATCATCAT	GACTGGCTGC	CAGGCAGAGC	TGGATTCAAA	GAAAACCCTG	TGACATACAC	240
TTTCCGAGGA	TTTCGGTCAA	CAAAAAGTGA	GACAAACCAC	AGCTCCCTTC	GGAACATTTG	300
GAAAGAAACA	GTCCCTCAAA	CCCTGAGGCC	TCAAACAGCA	ACTCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:432:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 261 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

```
GAATTCGGCC TTCATGGCCT ACCTGGATTT CTCAATTTAT TAAGTTGTAC TTACCTGATG      60
CTGATGATGA TTAAGTGTATT TACACATTGT CTCAGAGCTC ACTCTTGGCG AGGTTGTGGC      120
CTCGAAAATG CCTTGTGTGC CCTCTGGAAT CTGTCTTTTC AGCTTCATCT CCTCCTCCTC      180
ACCTCCTGCT GTGGTGACA GATACCTATA GGCAGGCTCC ATCTCCTCCT CCCAGCTCC      240
TCCCCTAGTG CACACCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

```
GAATCTAGA CCTGCCTCGA GTCCTACGGG AAACCTCCAG GGTTTTAGGA AGCTGACGAT      60
GCAAGTTTAT CCAAATGGGA ATGATAATAA TCATGTTTAT TATCCTGGGG TGCTTCTCC      120
ATAGCAAGTA CTCACCTAGG TCCTGTTCAT TAGTCAGTCT TTTAATCTGT ACTGAAATAG      180
GTGCTGTCGC ATCCATGGGG AATGAACTCG AG                                     212
```

(2) INFORMATION FOR SEQ ID NO:434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

```
GGTTGCAGTG AGCTGAGATC GCACCACTGC ACTCCAGCCT GGGCAACAGA GTGAGACTTC      60
ATCTCCAAAA AAAAAAAAAA AAAAAAAGA CAACCACAAC AAAAACGAAA CACCACCACC      120
AAAAAAGTTT ACTGGTAGAG TCTCCTCTAG ATTGTTTCT TTTCAATACT TGTTTCATAT      180
TCTCCAAC TG CCTCGTCCC ATAATGTTGG CTGTGCTTTT CTTGTGCTT ACAGCTCATT      240
GCTGGGATGG ATATGGTGAG TTTTCATGTA CATTGACCAA ATACAATCTC GAG          293
```

(2) INFORMATION FOR SEQ ID NO:435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

```
GAATTCGGCC TTCATGGCCT AGGCTTGAAA GGAAATGAGG GAAATTTTCAG TGAGTTTGAG      60
```

GAATGGCAGA	CTGGGTATGT	GACAAATGAG	TGGGTAAATA	AGGAAATCTC	AGATTGAGAA	120
TCCTGGCAGA	TCTTTCAATG	GGTTAGACTG	CAGGAATATT	GATTTTAAAG	CCAGACTGAA	180
GCAAATTCTA	GTGATAAAGG	AAGGGGAAAG	GGTGGCTGAA	TCAAATGTTT	TACCAATACT	240
CCTTTTTTTA	GTATTGAGT	TAAAATTCAG	ATTANATGCT	TGGCTTAGAA	GAATGCAAAG	300
CTTCACTGAG	CCTAATAATA	TGGATCCCAG	TGGGTGAGTG	GAGGTGAGTT	CACTCGAG	358

(2) INFORMATION FOR SEQ ID NO:436:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 258 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

GCTCGAGAGA	GCTTTTTTTT	TTTTTTTAA	ACATTGTATC	ATTAATTTAT	CACGTGTATC	60
CAAGCTCCTT	TGAGTTTCCC	TGCCCCATC	CCTGTGTCAT	TCCAGCCATA	TCCAGCTACT	120
CCTTCCATGC	TTCCCCATT	CTTGTTCTG	ACTCTATTAC	TCCCAGTCCA	AATCTTGCTC	180
TTCACTGTCT	GCACCTTGTG	CTCTCCTCTC	TCTCAAAAAA	TCTACCCAAA	TTCCACCCCT	240
CTTCACAGGC	CCCTCGAG					258

(2) INFORMATION FOR SEQ ID NO:437:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

CAAGCCGGCC	ATATTAGAGA	GATGGAAATA	AAGCTTCCTT	AATGTTGTAT	ATGTCTTTGA	60
AGTACATCCG	TGCATTTTTT	TTTAGCATCC	AACCATTCTT	CCCTTGAGT	TCTCGCCCCC	120
TCAAATCACC	CTCTCCCGTA	GCCCACCGA	CTAACATCTC	AGTCTCTGAA	AATGCACAGA	180
GATGCCTGGC	TACCTCGCCC	TGCCTTCAGC	CTCACGGGGC	TCAGTCTCTT	TTTCTCTTTG	240
GTGCCACCAG	GACGGAGCAT	GGAGGTCACA	GTACCTGCCA	CCCTCAACGT	CCACTCGAG	299

(2) INFORMATION FOR SEQ ID NO:438:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 238 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

GAATTCCTAC	TAAATAATAT	TAAGCAGGAA	TTTTTTAGGT	GTTGCTTTTT	AGTCCTTTT	60
TATCAGTTCT	GGGAAGCAAA	CAGTGCTGCA	TCTCCTTTGC	TCTCATAGAA	TTCTGTAATT	120
TTTATACCAC	AGGTCTCTGC	TAAAAGGCGG	CATGTGTTTA	GAAATTCTAA	AAATGAGGGC	180
TCTGAACCTT	GTAAGTGTCC	TGATACGTTT	TCCCTTTTTT	AATCCCAACC	CCCTCGAG	238

(2) INFORMATION FOR SEQ ID NO:439:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 229 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

```

GAATTCGGCC TTCATGGCCT ACAACTTGCA CTTGCTCCA GCATCACTGG CCTCCTGCTG      60
TTATTTAGGT ATACTAGGCA TTTCTGTTT TAGGGCCTTT GTACCTCCAG TTCCCTCTGT      120
TTGGAATGCT TTTCCCCAGA TAGCCCTGTG GTTAAATCTC TTACTTCCTT TGGGTCTGTG      180
CTCAGATGTT ACTTTCTCAG AGGGTCCCCC AAGCCCCCAT GCACTCGAG                229

```

(2) INFORMATION FOR SEQ ID NO:440:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

```

GAATTCGGCC TTCATGGCCT AGAGTCTATT AACTATTTT CTGTTATACC CTGCCAGAAA      60
AGAATTTTAA AAGTTAGTTT ATGTTTGTG TAACCATGTT CTTCAGAATG CAGGTATGTT      120
AGCATCATGG TTTCTGGGTA ATTCTGCTGC TCCTGTCTTT GAAAATGGAG ATACCACTTG      180
CAGCTTATCC CACTGCTGAG TATTCCAGCA TTGGTAGTGG TTCACTCCA TTGCATCCAT      240
CCAGAACTTT CACACAGGCC TCCCATTAC CCAGCATCCT CGAG                284

```

(2) INFORMATION FOR SEQ ID NO:441:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

```

GAATTCGGCC TTCATGGCCT AATAAAATAA AAATTGGAAG AATGGCATT TATTACAGTA      60
TAGTTAAGAG ATTGGCTAAG GCAGTAAATA AACTTAGAA ATGCTCAAAT TTATTGTAAA      120
TTGCTTTTAT AATCATTGAT ATATAAGCA TGCTACTGCT AATCAATTAG TTTTATGTAT      180
TAAGACCTAT CAGCATGTCT TTTTTTTAGT ATCTGGTTGA CTAAACATG ATGTTCTCTG      240
TACCATTAA CATTTCAG ACATATTCTC CCCAACTCG AG                282

```

(2) INFORMATION FOR SEQ ID NO:442:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

```
GAATTCGGCC TTCATGGCCT ACTCACCTGC AATCTATTGT TTATATTGTT GCTATGTATC      60
TCTATTCTTT CTGCATCAAA TAATGAATAG CTCATTTTGT GTTGCCTTCA AGTATGACAA      120
ATTCTTTTCC AAATGTGATT CCAGACAGTA TATCCAAACA TGTCTTTCTT TTCCCATTCC      180
TGATCATCCT ACATGTCAAG CACTGCCAAC GTTTACTCAA GAAAGCTTGG TTAGAACCCA      240
G                                                                    241
```

(2) INFORMATION FOR SEQ ID NO:443:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 249 base pairs
(E) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

```
GCAAGCACAA ATCTAACCAT GAGCTTCAGC AATCAGCTCA ATACAGTGCA CAATCAGGCC      60
AGTGTCTTAG CTTCCAGTTC TACTGCAGCA GCTGCTACTC TTTCTCTGGC TAATTCAGAT      120
GTCTCACTAC TAAACTACCA GTCAGCTTTG TACCCATCAT CTGCTGCACC AGTTCCTGGA      180
GTTGCCCAGC AGGGTGTTTC CTTGCAGCCT GGAACCACCC AGATTTGCAC TCAGACAGAT      240
CCTCTCGAG                                                                    249
```

(2) INFORMATION FOR SEQ ID NO:444:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 225 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

```
GAATTCGGCC TTCATGGCCT AGGGATTTTT TTTCTTTTTT TTCCTCATAT GTGAAGTAAT      60
AGTCTCTTCA CAACAGAAGA AGCCACAAAA CTAACTTAT TGGTCACTGA ATTTTCTTCA      120
AGGTTACGTA CCTCTTTGGT ATTTTAAATC TAGATTATGT TGATTTTAT ATTTTGTTC      180
TCATTTTCT ATTTCTTTGT TTTCTTTACT GCAAATGGGC TCGAG                          225
```

(2) INFORMATION FOR SEQ ID NO:445:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 248 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:


```

GAATTCGGCC TTCATGGCCT AGTTTGGAG AGCTCTACCT ACTAGCTGGT TATTTCTTAC      60
ATTAAATTAA TACCTTTAAA AAGTATTATG AAAATAACAC ACTCAGTAAA AGAAATTTTA      120
AAAAACAAAT GCAATAAAAA TGTGTTTCTT TTCAACCTTT GACTTGTCAC TTCCTCCAGC      180
TTTTCCCTTA TTTAACTGTG AGAGGTATTC TCTATTAGCA GTTACTTATC CCCTTCCTCA      240
AACTCGAG                                         248

```

(2) INFORMATION FOR SEQ ID NO:446:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

```

GGATTGAATT CTAGACCTGC CTCGAGCGAC CTCTAGAATC CTACATTTGA AATATTCTGG      60
CAGTGAGGTG TTCATCCTAA CTCAGTCAGG TAGCTGTGGA CAGCCTTCAC CTGTTAGGAG      120
CTCCTTAGAA ATAAATTCTG AATACCTTTG GTTTTCTTTT ATCCTCCAGA GGAATTTCCA      180
CTATCTCCGA AGCTGTTCTT TGTTCCTGCT ACAATTCGCT TAGTTAATGT TCTTTTGTAG      240
CCTGTACTAT CTCGAG                                         256

```

(2) INFORMATION FOR SEQ ID NO:447:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

```

GAAGGCAAGA AAATCTATGG AAAGAGAAGG CTACGAGTCC TCGGGCAATG ATGACTACAG      60
GGGTAGTTAC AACACCGTGC TCTCAGGCC TTTATTTGAA AAGCAGGACA GAGAAGGTCC      120
AGCCTCCACG GGAAGCAAAC TCACCATTCA GGAACATCTG TACCCCGCGC CTTTCATCACC      180
TGAGAAAGAA CAGCTGCTGG ACCGCAGACC CACTGAATGT ATGATGTCGC GATCAGTAGA      240
TCACCTCGAG                                         250

```

(2) INFORMATION FOR SEQ ID NO:448:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 198 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

```

GAATTCGGCC TTCATGGCCT AGCTGGGGGG AATAGGTTAT GTGATAAGGA GTCAGTCGGA      60
CAGAGTGGGG TGAAAGATGT TCAGACAGGG AAACACACAT GCAANAGAGG GAAGGTGGGA      120
CACAGCATAT GCNTCCAACA TTTGGTAGGG CCGAGGCCCC ACATGGGAGC AGTGAGAGGT      180
TAGGGATCGA CGCTCGAG                                         198

```

(2) INFORMATION FOR SEQ ID NO:449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

```

GAATTTTCCT TACCAGGAAA ATTCATGCTT TACAATTTGT CAGAGGTGCA CATTACTAAT      60
TACAATAGGT CACACTTTTT CTATGCGCTT CATTATAATA TTGGCAACTT TATTATGCCC      120
CATTACATAC TGTATTATGC TCTTACTTTA TATGCATTTT GAG                          163

```

(2) INFORMATION FOR SEQ ID NO:450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

```

GAATTGCTGA TATCTTATAA AGGGGACCTT TTTCTTTTAC ATTTCTGACG GTTTTTATCA      60
GAATGTATGT ATTAATGCTA TTTGTCTTTG TATATTTATT TTATTTCCAG CCACTTCTCG      120
AG                                      122

```

(2) INFORMATION FOR SEQ ID NO:451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

```

GAATTCGGCC TTCATAGCCT AACTCAAGAT CTCCCATCTA TTAAAGCAGA GGAATAACTT      60
TTGTAGGCTT AATACTGCTT TCTCACTTAG GAAAAGTTGA AATTAAGAAC ACACAGGAAG      120
GGATCATTTT CTAAGGTTTA TGTCTCAAC ATCAAATTGA GTTGAAACTT GACTACAGGC      180
CATCTGCTCA TTCAAAGCAT TACAATAAAT CTGTCCTATT GATGATCAAA ATGAGAGCTG      240
AATTGGATGC AGGATTGGAC ATTGCAAGCT GTTCTCCCAA GTGGGATGGA AAGGTGCTCG      300
AG                                      302

```

(2) INFORMATION FOR SEQ ID NO:452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

GAATTCGGCC	TTCATGGCCT	ACAAAAATAT	TTATTTGACT	GAATGATTTA	ATATGCAGTT	60
ATGGTGTTTA	ATATATCATG	TGTTATTTGT	TTGTTTAAAT	ACAGACATAA	CCCACAGTTA	120
TCTTGAACAA	GAAACTACGG	GGATAAATAA	AAGTACGCAG	CCAGATGAGC	AACTGACTAT	180
GAATTCAGAG	AAAAGTATGC	ATCGGAAATC	CACTGAATTA	GTTAATGAAA	TAACATGTGA	240
GAACACAGAA	TGCCCCGGAC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

GAATTCGGCC	TTCATGGCCT	ACTTTAATTT	CTCTGAGCAG	TATTTTACAG	TTTTGATGTA	60
TAAACCTGGC	ACAGATTATG	TTCAGTTTAT	TTCTAAGTTT	AAGTCATGTT	TTTGAATGTT	120
ATATTAAAGG	ATATTTTCTT	TTTTAAAAAA	TCTACAATGT	TTATTTTATT	ATTATTATTT	180
TTAATCTCGC	TTCATCACCA	AGGCTGGAGT	AAAGTGACGC	GACCTCAGCT	CGAG	234

(2) INFORMATION FOR SEQ ID NO:454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

GAATTCGGCC	TTCATGGCCT	ACGCACATCC	GCAGTCAGCC	ACCTCGCGCG	CGCCTCCAGG	60
AGCAAGGATG	GAGAGGCTGG	TGATCAGGAT	GCCCTTCTGT	CATCTGTCTA	CCTACAGCCT	120
GGTTTGGGTC	ATGGCAGCAG	TGGTGCTGTG	CACAGCACAA	GTGCAAGTGG	TGACCCAGGA	180
TGAAAGAGAG	CAGCTGTACA	CACCTGCTTC	CTTAAATGTC	TCTCTGCAA	ATGCCCAGGA	240
AGCCCTCATT	GTGACATGGC	AGAAAAAGAA	AGCTGTAAGC	CCAGAAAACA	TGGTCACCTT	300
CAGCGAGAAC	CATGGGGTGG	TGATCCAGCC	TGCCTATAAG	GACAAGATAA	ACATTACCCA	360
GCTGGGACTC	CAAACTCAA	CCCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

GAATTCGGCC TTCATGGCCT AGCTGATATT ATTTCTGAGT TTTTGCTTAT TTGCTTTCTA	60
CATAGAATCA ATAAAATTGA CAACTAGCAT TGCCTATATA TGCAGGTGTG ATACTATTCA	120
GGGTACTAGT ATATTGGCCA CTCATTATGA AACTTTCAGG TCCTCATATA TTTTCTTTTA	180
TTACAATGAT CTACTTATTT CTGATAAATA TTGGATTCAT AGAGGCTAAA GGGCTGGGAA	240
AGGAAAACAT TCGTGACTAC TTACAACCAT TTGATACGAG TTGTGTCAAT ACAGACCTCA	300
CACAGCAGCA CCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

GAATTCGGCC TTCATGGCCC ACAAATGGT AATACAAATA AACCACTACT TACTGCTTTT	60
AATGGTAGTT TGTTTTTTT TTTTGAGAC AGAGTCTCGC TGTGTCGCCC AGGCTGGAGT	120
GCACTGGCGC GATCTTGGCT CACTGCAAGC TCCGCCTTC GGGTTCACAC CATTTTCCTG	180
CCTCAGCCTC CCGAGTAGCT GGGACTGCAG GCGCCCGACT CCCGGGTTC CACCATTCTC	240
CTCCCTCAGA CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

GAATTCGGCC TTCATGGCCT AGGAGAATCG TGAGACCTCT ATTTCCATAT CTTTTCTAC	60
TACTGGAATT TTTATTTTTA CCATACCCAT AAATTACTTT CTATTTTAAG AAGCAAATAT	120
ATAATTCCTC AGTTTAGTAA AAAGTTCTCA CTGAAAAGC TGGTATATGA ACTTTAGAGG	180
GCAGATTAAT CAACTGCTAA ATATTATTA TCTTCTTCT TGGAACCTTC CAACACAAAA	240
GACAGTTTAT AGAAAACAAA GTCAGTGTTT AAAACAGCTG AATGAACTAT CTTTTGATAT	300
TTTATTGTT TTTGTTTTGT TTTGTTTTGT TGAGACAGAG TCTTGCTCTG TTGTCCAGGC	360
TGGAGAGTAA TGGCAGATG ACTGCAACCT CTGCCTCCCG GGCTCAAGTG ATTCTCCTGC	420
CTCAGTCTCT CGAG	434

(2) INFORMATION FOR SEQ ID NO:458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

GAATTCGGCT TCATGGACGA GGAGATCGTG TCCGAGAAGC AAGCCGAGGA GAGCCACCGG	60
---	----

CAGGACAGCG CCAACCTGCT CATCTTCATC CTGCTGCTCA CCCTCACCAT TCTCACAATC	120
TGGCTCTTCA AGCACC GCCG GGGCCGCTTC CTGCACGAAA CCGGCCTGGC TATGATTTAT	180
GGTCTTTTGG TGGGCCTTGT GCTTCGGTAT GGCATTATG TTCCGAGTGA TGTAATAAT	240
GTGACCCTGA GCTGTGAAGT GCAGTCAAGT CCAACTACCT TACTGGTAA TGTTAGTGGA	300
AAATTTTATG AGTATATGCT GAAAGGAGAG ATACTCGAG	339

(2) INFORMATION FOR SEQ ID NO:459:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

GAATTCGGCC TTCATGGCCT ACTTATTTT GTTTCTGTGT GTTTGTTTAA AATGTGTGTG	60
CGCTCATGTG AGTTTGAAGG GAGTTAGATG CAACAGCAGG AGCTGTGCTC AGGCGAGTGG	120
TGTTAATTAT GGAGGGCGTG GGAAGGGCTG GGAAGAGGAG GGGGTTGTAA GACTCCCCTT	180
TTCCCTCGCA TGTAACAGA TGCTGGTGAC TGAAAGTCTG TCTGCGGTTA TTGCAAGAG	240
TGACGGAAAG CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:460:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

GAATTCGGCC TTCATGGCCT AATTTGAAAA TTCATAAGTT TCTACCAATA CTTCCAATTT	60
CAATCCAACA TCTGAGGATC TCCCTAGATT TCCTATTTCC ATGATTATAA CTCTTGTAAC	120
AGATGATAAG AACATGGAT CTGACTATAC TCAATTTATT CACATATTTT CTCAGTGAAC	180
TAACCTATTT GCTGAATATA ACCAGTCCCC AGCCTTCCAA CTGCCTCTCT CACTTGCCAC	240
CTCTGCATCT TCCCCACTG TCTTCTCAG CAATCAGACT GCCTCTTGCC AAGTCATCAC	300
CACAGCACCC CACTCTCGAG	320

(2) INFORMATION FOR SEQ ID NO:461:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCGGCC TTCATGGCCT ACCCTCTACT ATTTTGAAC CAAATCAACA ACAACCTATT	60
TAGCTGTTCC CCAACCTTTT CCTCCGACCC CCTAACACC CCCCTCCTAA TACTAACTAC	120
CTGACTCCTA CCCCTCACAA TCATGGCAAG CCAACGCCAC TTATCCAGTG AACCACTATC	180
ACGAAAAAAA CTCTACCTCT CTATACTAAT CTCCCTACAA ATCTCCTTAA TTATAACATT	240

CACAGCCACA GAACTAATCA TATTTTATAT CTTCTTCGAA ACCACACTTA TCCCCACCCA 300
TCTCGAG 307

(2) INFORMATION FOR SEQ ID NO:462:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GAATTCGGCC TTCATGGCCT AGTACAATTT AATATAATTT CTTACAAGTT TATTACCTAA 60
AACTTTGCAA ATAATTGAAG TTAGAAGCTT TGGATTTTGT TTTTAGAGCT TAATCCTTTT 120
CTGTAAGTGG AAATCCTTTC CACTGGTTTA TTTTCCTTTT GATTTTATTT TACTTTGACA 180
CCCTAAAGGT TTAGTGTTCC TGTTTTTAAA TCTACTGATC GTTTCTTATG AGATTCCTTA 240
GAGTACCCCT CGAG 254

(2) INFORMATION FOR SEQ ID NO:463:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

GAATTCTAGA CCTGCCTCGA GAGGACGCCG GAGAGAAATG AGTAGCAACA AAGAGCAGCG 60
GTCAGCAGTG TTCGTGATCC TCTTTGCCCT CATCACCATC CTCATCCTCT ACAGCTCCAA 120
CAGTGCCAAAT GAGGTCTTCC ATTACGGCTC CTTGCGGGGC CGTAGCCGCC GACCTGTCAA 180
CCTCAAGAAG TGGAGCATCA CTGACGGCTA TGTCCTTATT CTCGGCAACA AGGTAGCGCA 240
GCTGCTTTGG GGAGCTCCTC CCTACTGCCC AGCAAACTC GAG 283

(2) INFORMATION FOR SEQ ID NO:464:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

GAATTCGGCC TTCATGGCCT AAAAAGTGGT TCCTATTTTC CTGTTGAAC CTGAGTGAT 60
ACACCCAGTA TTGTACCACC CAATTAGTAG ACATTATTTT TTCTTAGGTC ATATTATTCT 120
CAGCTTATAG AGCAAGAAGT TGAAGCTTAA AGGGTTAGAT TACTTGCCCA AGGTAATACA 180
GCAAGAATCT TATTTTCATCC AACCTAGAGT GAATATTTCC CCCACATCTC GAG 233

(2) INFORMATION FOR SEQ ID NO:465:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

```
GAATTCGGCC TTCATGGCCT ACTGATGTTG AAGACGACAC CACGGCTTTG ATGGAATATC      60
AGATATTGAA AATGTCTCTC TGCCTGTTCA TCCTTCTGTT TCTCACACCT GGTATTTTAT      120
GCATTTGTCC TCTCCAATGT ATATGCACAG AGAGGCACAG GCATGTGGAC TGTTTCAGGCA      180
GAAACTTGTC TACATTACCA TCTGGACTGC AAGAGAATAT TATACATTTA AACCTGTCTT      240
ATAACCACTT TACTGATCTG CATAACCAGT TAACCCAATA TACCAATCTG AGGACCCTGG      300
ACATTTCAAA CAACAGGCTT GAAAGCCTGC CTGCTCACTT ACCTCGGTCT CTGTGGAACA      360
TGTCTGCTGC TAACAACAAC ATTAAACTTC TTGACAAATC TGATACTGCT TATCAGTGGA      420
ATCTTAAATA TCTGGATGTT TCTAAGAACA TGCTGGAAAA CGTTGTCCTC ATTAAAAATA      480
CACTAAGAAG TCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

```
GAATTCGGCC TTCATGGCCT AGCCCCGACT AGCTTTGCCC TAACTCCTTC ATCAAAAGAC      60
CCCCCGCCAG CTTCCACAC CTCATACGCA GCCACATCTG CCCTATTCTC CATGCTTTCC      120
AGCTTGCCCTG CCCTTCCTCA TCTCTCCCTG CCTGTGCAGA CCTCCACCTT TCTTTCTCTC      180
ACCCCTCCAT CCCCCAATGC TTGTAGACCT TCCATTTCATT CCGTCTCATC GTGCGTGGTC      240
TCTGATCGTC CATCACCTGA CCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

```
GTTTACATAA ATATTATACT AGCATTTACC ATCTCACTTC TAGGAATACT AGTATATCGC      60
TCACACCTCA TATCCTCCCT ACTATGCCTA GAAGGAATAA TACTATCGCT GTTCATTATA      120
GCTACTCTCA TAACCTCAA CACCACTCG AG
```

(2) INFORMATION FOR SEQ ID NO:468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 198 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

```
CAATATTTCA AGCTATACCA AGCATACAAT CAACTCCAAG CTCGGAATTT TAACTTCATG      60
GCAAACAGAA AAGCTAGACT GAGTTATCAG TGTTGTGAGA GGAATATTTG GCCCAACAAG      120
AGTTGTTGGG GTGGGAGGAG GGAGAGACAA AAGGAAAGGA CTGCCAGCTC TCAGAGGGTG      180
GAGATGGGGG ACCTCGAG                                     198
```

(2) INFORMATION FOR SEQ ID NO:469:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 288 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

```
GAATTCGGCC TTCATGGCCT ACTGCTATAT TCAAGTTTCT CCCACTACTG TGGTTTCTTT      60
TTTTTTTTTT TTTTTTTTTT TTTTGAGACA GGGTCTTGCT CTGTCACCCA GGCTGGGGTG      120
CAGTGGTGCG ATCTCGGCTC ACTGCAAATT ACACCTCCTG GATTGAGCA ATTCTCATGC      180
CTCAGCTTCC TGAGTAGCTG GGATAACAGG TATGCACCAC CACCCCTGGC TAATTTTGTG      240
GTTTTTAGTA GAGACAAGTT CTCACCATGT TGTCCAAGCC ACCTCGAG                                     288
```

(2) INFORMATION FOR SEQ ID NO:470:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 326 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

```
GAATTCGGCC TTCATGGCCT AAAAGAAGAA TACTAATTAG AATTGAGTT CTAGGGGTTT      60
TTCCTAGGTT TTTCAATTCTA GACTTAGCTT TTATTCAAAC CTGTTGATCC TGCATAGGGG      120
TAGTCTAGCT TTAAAAAATA AAACAATAAA CATAAATGAG CCTATTGAGT TCAATCAGAG      180
TAGGGAGCAG TTTTATTGAA CAGCACATTT TCAAATTCCT CAGTTGTGTT TTGTTTTTCA      240
GCTACGTGTC TCTCTGTGAT AATGAAAAGA CAGGTTGCAA AGCCCGGGAA CTAAATCAG      300
TTTATGTGGA TGCAGTAGGA CTCGAG                                     326
```

(2) INFORMATION FOR SEQ ID NO:471:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 326 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:


```

GAATTCGGCC TTCATGGCCT AGTGTAAGT GTTTTGCAC AGTGCCAGC AATTTGCAGT      60
ATTTAATGGT CCTTCCTCCT TATTTATTTT TATTACTTGT TTTTGTTTT TTGAGACAGT      120
GTCTTGCTCT GTCGCCAGG CTGGAGAGCA GTGATATTAT CGTGACTCAC GGCAGCCTCG      180
ACCTCCAGC CTCAGGTGAT CCCTTCACCT CAGCCTCCA GGCAGCTGGG ACCATAGCTA      240
TGAACAAACA CGTCCAGCTA TGTTTGTAT TTTTGTGAA GACGGAGTCT CACCATGTTG      300
CCCAGGCTGA TCTCCAAC TCAGAG                                     326

```

(2) INFORMATION FOR SEQ ID NO:472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

```

GGAAAGGTGT TGTCCCTTGT AACATTTTGG TTGGCTATAA AGCTGTATAT CGTTTGTGCT      60
TTGGTTTGGC TATGTTCTAT CTTCTTCTCT CTTTACTAAT GATCAAAGTG AAGAGTAGCA      120
GTGATCCTAG AGCTGCAGTG CACAATGGAT TTTGGTTCTT TAAATTTGCT GCAGCAATTG      180
CAATTATTAT TGGGGCATTG TTCATTCCAG AAGGAACTTT TACAACTGTG TGTTTATG      240
TAGGCAACCT CGAG                                     254

```

(2) INFORMATION FOR SEQ ID NO:473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

```

GAATTCGGCC TTCATGGCCT ACAGAAATCT AATTCCTGGT GCTATTGCA ACTACATATA      60
TTTAAATAC AAGGAGATAA ATACCCAGAA CACATTAAGC CTACTGATTT AAACAGAACA      120
TTCAAGACT GCTACAGAGA AAGGGAAGGA AGCTGTTAAC CCAGCACAGC AGCACACCTC      180
ACATATTTAC GTCTCAGAGA TTAAATGGAA AGAAAGGATC AATCAAAACC TTTAATGCTC      240
AGTTTTCACA AACACAGTCA AGTCTATCAA ATTTCCAGAT TTACAG                                     286

```

(2) INFORMATION FOR SEQ ID NO:474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

```

GAATTCGGCC TTCATGGCCT ACAATTAAAA GGTCTGTGTA AATTACGTCT TTCAGTCTGA      60
AATTACTCTG AGAATTTACT TAAAAATTTT CCATTTAAAA ACAGGTATAA AATTAATTGC      120
TAGTTTCCAT AATCACCAG TATAAGATA GAAAGACCT GTAAGACAAC TGTGTGTTA      180

```

AATACATGAT AACACATTTA CGTGCCTTTT ATAGAAATCC ACTTATTATG TACATACTGG	240
CTTGTTTTTTT TTCCCACTTC TCCAGTACAC TATTTCAAGC ACAGGCTCAA AATTTGAACC	300
CAAATGGTCT GTTAGGTCTC TTGACTTTTT CAGTTCAAAG CTCTGCTAAT CTGCTAAACC	360
TAGCCCCAAA CCCACTCGAG	380

(2) INFORMATION FOR SEQ ID NO:475:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 254 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCTAGA CCTGCCCGGA GCCCTGACCT AGTCCGGCGT GGAGAGAGGA ATGGAAAGCA	60
GTGTCCCTTT TGAGAAGGCA AATTTACAGC TGGCTTTTGT AATCCTAGCT ATTTTTGT	120
TGTTTGCTAA GTCTTTGATA GTCCCCAGTG TGGTTTGTCT GCCAGTGATC TCAGCACCAC	180
CAGAGAGCTT GTTAGAAATG CGGCATCCCA ACCCACCAC AGCCCTCCA AGTCAGATAC	240
TCCCCCTCT CGAG	254

(2) INFORMATION FOR SEQ ID NO:476:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 389 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

GAATTCGCTG TGGAGCTGGG CGTGCTGTTT GTCCGGCCCC GGCCCGGAAC CGGGCTGGGT	60
AGAGTGATGC GGACCTCCT GCTGGTGCTG TGGCTGGCGA CGCGCGGAAG CGCGCTCTAC	120
TTTCACATCG GAGAGACGGA GAAGAAGTGC TTTATTGAGG AGATCCCGGA CGAGACCATG	180
GTCATAGGAA ACTACCGGAC GCAGCTGTAT GACAAGCAGC GGGAGGAGTA CCAGCCGGCC	240
ACCCCGGGGC TTGGCATGTT TGTGGAGGTG AAGGACCCAG AGGACAAGGT CATCCTGGCC	300
CGGCAGTATG GTTCCGAGGG CAGGTTCACT TTCANTTCCC ATACCCNTGT GTGAGCACCA	360
GATCTGTTTT CANTCCAATT CCACTCGAG	389

(2) INFORMATION FOR SEQ ID NO:477:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 431 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

GAATTCGGCC TTCATGGCCT AGAAGGAAAT AAAGGCCCCG ATTTCTGGAG TTCTGAGCCT	60
ACTTTTTTTT GGTGCATTTT GAAACATACG GATTTTACCG CTAGTATATT CAGTGAGGAA	120
GGAAGGCTTC TGAAGGATTG ATGATCCCCA AACTGGATTA TGTGTTTATG ATAATGGTGT	180
ATTTGGTGGC CTAGCATAGT GAGGTGAGGT AGGTCTTTAA AATGGCTCAT TATAAACATC	240

ATTGTTCTCTG AGCTCACTTG CCCTTGCATC TCCTGCCAGA GTGCTTTGTA CATAGTAGGC	300
CCTCATCAAT GCTTGTAGAT TTAAATTCG GAGGCACACT TGGAAGACAA TGGTGGCTGG	360
TAAATTAATT ATCAGGGTTA GCAACTTCAT TTCTGCTNAC GCTTAAAAAG TGCTGCGCGA	420
GGAAACTCGA G	431

(2) INFORMATION FOR SEQ ID NO:478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

GCCTCTGNTT TTAATTCATT GGCAACTGTT ACGATGGAAG ACCTGATTCC ACCTTGGTTC	60
CCTGAGTTCT CTGAAGCCCG GGCCATCATG CTTTCCAGAG GCCTTGCCTT TGGCTATGGG	120
CTGCTTTGTC TAGGAATGGC CTATATTTC TCCAGATGG GACCTGTGCT GCAGGCAGCA	180
ATCAGCATCT TTGGCATGGT TGGGGGACCG CTGCTGGGAC TCTTCTGCCT TGGAATGTTC	240
TTTCCATGTG CTAACCTCC TGGTGCTGTT GTGGGCCTGT TGGCTGGGCT CGTCATGGCC	300
TTCTGGATTG GCATCGGGAG CATCGTGACC AGCATGGGCT TCAGCATGCC ACCCTCTCCC	360
TCTAATGGGT CCAGCTTCTC CCTGCCCACC AATCTAACC GTGCCACTGT GACCACACTT	420
CTCGAG	426

(2) INFORMATION FOR SEQ ID NO:479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

GAATTCGGCC TTCATGGCCT AAATTTTCAG GCAGTTTGAA GTATCTGGCA GAAAAAGTAA	60
ATTGAAATCA TTGGGACGTT GATTTTAA TACCTAGAA GCAATCCCA TGCTTTATGT	120
AATACTAAAA TTTCTCCTCT CTCTTTCTT TATCTCTCT TCCCCTGAAA ATAATCATTT	180
TTTTTCCAGT GCCAGTTCAG ATCTTGGCAA CAGTTGTTT GAAAAAGTAC CTGAACAAAA	240
TACATTTTAT AAAGTAAAGT ATTCAGGAAC TGACAGAACT GGAGAAGAAT ATATTTATGT	300
TACAGAAGTC ATGGACAACC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

GGCAAGTAAC AGGTTGCAAG AATTGGAGGC AGAGCAACAG CAGATCCAAG AAGAAAGAGA	60
ATTACTGTCC AGACAAAAGG AAGCTATGAA AGCAGAGGCA GGCCAGTTG AACACAATT	120

ACTACAGGAG ACAGACAAAT TAATGAAGGA AAAACTAGAA GTACAATGTC AAGCTGAAAA	180
AGTACGTGAT GACCTTCAAA AACAAGTGAA AGCTCTAGAA ATAGATGTGG AAGAACAAGT	240
CAGTAGGTTT ATAGAGCTGG AACAAGAAAA AAATACTGAA CTAATGGATT TAAGACAGCA	300
AAACCAAGCA TTGGAAAAGC AGTTAGAAAA AATGAGAAAA TTTTATGATG AGCAAGCCAT	360
TGACAGAGAA CATGAGAGAG ATGTATTCCA ACAGGAAATA CTCGAG	406

(2) INFORMATION FOR SEQ ID NO:481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

GAATTCGGCC AAAGAGGCCT AGTCGGTGCC TCATTGGTAT AAATGTTATG TCTGCATGGG	60
TTTTTTCTAC AATTTCTTTC TAAGATTATT TCTCCCAAA GCTCAGCACT TTTGGAATTT	120
TTCATTCTCA TCCAAAAATG GAAGCAATTT TATGTAAATG TCTCTTGGAA GCAGTGTGG	180
AATTCATATT TTGGGTAGCA GAAGCAGTAG TTACAAGGGT AGTGGTGTCT TTTGTGGTGG	240
TGGTGGCACC TGCTGCAGTT GTTCATATTT GGGGTGCAGG AGTAGGGAGG GTAGGATCAG	300
TTGGAGAATT TACAGGGAAT AATGGAGGTC CAGGTGGATA GGTCTAGAA TTCAATC	357

(2) INFORMATION FOR SEQ ID NO:482:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGGCC AAAGAGGCCT AAGTGAATCC AGAGCCTCCT GCAAGATGCT GTTGATTCTG	60
CTGTCACTGG CCTTGCTGGC CTGAGCTCA GCTCAGAACT TAAATGAAGA TGTCAGCCAG	120
GAAGAATCTC CCTCCCTAAT AGCAGGAAAT CCACAAGGAG CACCCCCACA AGGAGGCAAC	180
AAACCTCAAG GTCCCCCATC TCCTCCAGGA AAGCCACAAG GACCAACCCC ACAAGGAGGC	240
AACCAGCCTC AAGGTCCCCC ACCTCCTCCA GGAAACCAC AAGGACCACC CCCTATTCTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:483:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

GAATTCGGCC AAAGAGGCCT AAGCAGACAC AATGGTAAGA ATGGTGCCTG TCCTGCTGTC	60
TCTGCTGCTG CTCTGGGTC CTGCTGTCCC CCAGGAGAAC CAAGATGGTC GTTACTCTCT	120
GACCTATATC TACTGTTGGC TGTCCAAGCA TGTGAAGAC GTCCCCGCGT TTCAGGCCCT	180

TGGCTCACTC	AATGACCTCC	AGTTCTTTAG	ATACAACAGT	AAAGACAGGA	AGTCTCAGCC	240
CATGGGACTC	TGGAGACAGG	TGGAAGGAAT	GGAGGATTGG	AAGCAGGACA	GCCAACTTCA	300
GAAGGCCAGG	GAGGACATCT	TTATGGAGAC	CCTGAAAGAC	ATCGTGGAGT	ATTACAACGA	360
CAGTAACGGG	TCTCACGTAT	TGCAGGGAAG	GTTTGGTTGT	GAGATCGAGA	ATAACAGAAG	420
CAGCGGAGCA	TTCTGGAAAT	ATTACTATGA	TGGAAAGGAC	AAACTCGAG		469

(2) INFORMATION FOR SEQ ID NO:484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 516 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GAATTCGGCC	AAAGAGGCCT	ACTACTTCTG	TAGTCTCATC	TTGAGTAAAA	GAGAACCCAG	60
CCAACTATGA	AGTTCCTTGT	CTTTGCCTTC	ATCTTGGCTC	TCATGGTTTC	CATGATTGGA	120
GCTGATTCAT	CTGAAGAGTA	TGGGTATGGC	CCTTATCAGC	CAGTTCCAGA	ACAACCACTA	180
TACCCACAAC	CATACCAACC	ACAATACCAA	CCTGCCTCAA	GGTCCTCCAC	CTCCTCCAGG	240
AAAGCCACAA	GGACCACCCC	CACAAGGAGG	CAACAAACCT	CAAGGTCCCC	CACCTCCAGG	300
AAAGCCACAA	CGACCACCCC	CACAAGGAGG	CAGCAAGTCC	CGAAGTTCTC	GATCTCCTCC	360
AGGAAAGCCA	CAAGGACCAC	CCCCACAAGG	AGGCAACAAA	CCTCAAGGTC	CCCCACCTCC	420
AGGAAAGCCA	CAAGGACCAC	CCCCACAAGG	AGGCAGCAAG	TCCCGAAGTG	CCCGATCTCC	480
TCCAGGAAAG	CCACAAGGAC	CATCCACAA	CTCGAG			516

(2) INFORMATION FOR SEQ ID NO:485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

GAATTCGGCC	AAAGAGGCCT	ACTTCACTTC	AGCTTCACTG	ACTTCTTGAC	TCTCCTCTTG	60
AGTAAAAGGA	CTCAGCCAAC	TATGAAGTTT	TTTGTCTTTG	CTTTAGTCTT	GGCTCTCATG	120
ATTTCCATGA	TTAGCGCTGA	TTCACATGAA	AAGAGACATC	ATGGGTATAG	AAGAAAATTC	180
CATGAAAAGC	ATCATTCA	TCGAGAATTT	CCATTTTATG	GGGACTGTGG	ATCAAATTAT	240
CTATATGACA	ATTGATATCC	TTAGTAATCA	TGGGGCATGA	TTATAGAGGT	TTGACTGGCA	300
AATTCACTTT	TACTCATTTA	TTCTCATTC	TCACACCGCA	AGTCTAGGCC	TCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 643 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GGTTACCATC CTCAAAGGAT TGGCTAAAAG CAAGCAACTG GATTGAACAC CCTAAGAAGA      60
AAGATTTCACA CTGCACCAGG AGACATCAGA AAGAATGAAA ACTCTGCCGC TGTTGTGTG      120
CATCTGTGCA CTGAGTGCCT GCTTCTCGTT CAGTGAAGGT CGAGAAAGGG ATCATGAACT      180
ACGTACACAG AAGGCATCAT CACCAATCAC CCAAATCTCA CTTTGAATTA CCACATTATC      240
CTGGACTGCT AGCTCACCAG AAGCCGTTCA TTAGAAAGTC CTATAAATGT CTGCACAAAC      300
GCTGTTAGGC CTAAGCTTCC ACCTTCACCT AATAACCCCC CCAAATTCCC AAATCCTCAC      360
CAGCCACCTA AACATCCAGA TAAAAATAGC AGTGTGGTCA ACCCTACCTT AGTGGCTACA      420
ACCCAAATTC CATCTGTGAC TTTCCCATCA GCTTCCACCA AAATTACTAC CCTTCCAAAT      480
GTGACTTTTC TTCCCCAGAA TGCCACCACC ATATCTTCAA GAGAAATGT TAACACAAGC      540
TCTTCTGTAG CTACATTAGC ACCCAGTGAA TTCCCCAGCT CCACAAGACA CCACAGCTGC      600
CCCACCCACA CCTTCTGCAA CTACACCAGC TCCACCCCTC GAG                        643

```

(2) INFORMATION FOR SEQ ID NO:487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GAATTCGGCC AAAGAGGCCT ACAAGATGCT GCTGGTCCTG CTCTCAGTGG TCCTTCTGGC      60
TCTGAGCTCA GCTCAGAGCA CAGATAATGA TGTGAACAT GAAGACTTTA CTTTACCATT      120
ACCAGATGTA GAGGACTCAA GTCAGAGACC AGATCAGGGA CCCCAGAGAC CTCCTCCTGA      180
AGGACTCCTA CTTAGACCCC CTGGTGATAG TGGAACCAA GATGATGGTC CTCAGCAGAG      240
ACCACCAAAA CCAGGAGGCC ATCACCGCCA TCCTCCCCCA CCTCCTTTTC AAAATCAGCA      300
ACGACCACCC CAACGAGGAC ACCGTTTCATC TCGAG                        335

```

(2) INFORMATION FOR SEQ ID NO:488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```

GAATTCGGCC AAAGAGGCCT AGACACATTG CCTTCTGTTT TCTCCAGCAT GCGCTTGCTC      60
CAGCTCCTGT TCAGGGCCAG CCCTGCCACC CTGCTCCTGG TTCTCTGCCT GCAGTTGGGG      120
GCCAACAAAG CTCAGGACAA CACTCGGAAG ATCATAATAA AGAATTTTGA CATTCCCAAG      180
TCAGTACGTC CAAATGACGA AGTCACTGCA GTGCTTGCGT TTCAAACAGA ATTGAAAGAA      240
TGCATGGTGG TTAAACTTA CCTCATTAGC AGCATCCCTT CTACAAGGTG CATTTAACTA      300
TAAGTATAAC TGCCAACCTC GAG                        323

```

(2) INFORMATION FOR SEQ ID NO:489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 128 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

GAATTCGGCC AAAGAGGCCT AGTGACACCA GAGCCTCCTG CAAGATGCTT CTGATTCTGC	60
TGTCAGTGCC CCTGCTGGCC TTCAGCTCAG CTCAGGATTT AAATGAAGAT GTCAGCCAGG	120
AAGATGTT	128

(2) INFORMATION FOR SEQ ID NO:490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

GAATTCGGCC AAAGAGGCCT AATTTTGACC AGCAGATTAA TCAACTGTAA GACGGATCCT	60
CACACAAAGA GGCAACTGAA AGGATGAAAT CACTGACTTG GATCTTGGGC CTTTGGGCTC	120
TTGCAGCGTG TTTCACACCT GGTGAGAGTC AAAGAGGCCC CAGGGGACCA TATCCACCTG	180
GACCGCTGGC TCCTCCTCAA CCTTTTGGCC CAGGATTTGT TCCACCACCT CCTCCTCCAC	240
CCTATGGTCC AGGGAGAATC CCACCTCCTC CTCTGCAGAG AAAACCTTTG AAGAAAAGCA	300
GGAACAGAGA TCGATGGCGA TCTATTTCCC TGTACTATAC TGGAGAGAAA GGTCAAAATC	360
GTCGAG	366

(2) INFORMATION FOR SEQ ID NO:491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

GGTTTCCCGT TTGTCCCTCC TTCAAGGTTT TTTTCAGCAG CTGCAGCACC CGCTGCCCCA	60
CCTATTGCAG CTGAGCCTGC TGCAGCTGCA CCTCTTACAG CCACACCTGT AGCAGCTGAG	120
CCTGCTGCAG GGGCCCCTGT TGCAGCTGAG CCTCCTGCAG AGGCACCTGT TGGAGCTGAG	180
CCTGCTGCAG AGGCACCTGT TGCAGCTGAG CCTGCTGCAG AGGCACCTGT TGGAGTGGAG	240
CCAGCTGCAG AGGAACCTTC ACCAGCTGAG CCTGCTACAG CCAAGCCTAG GCCTCT	296

(2) INFORMATION FOR SEQ ID NO:492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

CTCGAGTCCT TGTGGCTTTC CTGGAGGTGG GGGACCTTGA GGTTTGTGTC CTCCTTGTGG	60
GGGTGGTCCT TGTGGCTTTC CTGGAGGAGG TGAAGGACCT TGAGGCTGGT TGCCTCCTTG	120

```

TGGGGGTGGT CCTTGTGGCT TTCCTGGAGG AGATCGGGGA CTCGGGGAC TTGTCTCCTT 180
GTGGGGGTGG TCCTTGTGGC TTTCTGGAG GTGGGGGACC TTGAGGTTTG TTGCCTCCTT 240
GTGGGGGTGG TCCTTGTGGC TTTCTGGAG GAGGTGGGGG ACCTTGAGGC TGGTGCCTC 300
CTTGTGGGGG TGGTCCTTGT GGCTTTCCTG GAGGAGATGG GGGACCTTGA GGTTCCTTGC 360
CTCCTTGTGG GGGTGCTCCT TGTGATTTC CTGCTATTAG GGAGGGAGAT TCTTCCTGGC 420
TGACATCTTC ATTTAAGTTC TGAGCTGAGC TCAGGGCCAG CAGGGCCACT GACAGCAGAA 480
TCAACAGCAT CTTGCAGGAG GCTCTGGAGT CACTTAGGCC TCTTTGGCCG AATTC 535

```

(2) INFORMATION FOR SEQ ID NO:493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

```

GAATTCGGCC AAAGAGGCCT AGTCGGTAAT CACAACAAAC ACGGAGCAAT CTCAATGCTG 60
TTTATCCGGA GGACAGTCTG CGGGGTCGTG ACGATTCTTT TCTTCTTGAA GTTTTTCCTT 120
TTCCTGAATC TCATAATGAT TCTTGGCCAT GATTCTGTCT TTTCAATGAC TGTGGCTTCT 180
ACTCGAACAA GATCCTTTCC GAGGAGTGGC TTGCCAAGCA GCGTGAAGTT GTCTGCCCAA 240
ACCAGCAGGA CCTTCTCCAG TCGAATTCTC TCTCCACACG CAAGGTCTAG TTCATTTCCA 300
ATTAAGATCA GGTCTTCAGA G 321

```

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

```

GAATTCGGCC AAAGAGGCCT AACCTGCCTT GGTCTTGCT CCTCTTTCCA CGTTGGATAA 60
CAATTTTTTG GTTGTTTTGT TTAAGTTGGT GCTCTGAAGC TTAATCTCAG TACCCTTTAC 120
TCTGAATTGT CAAATTTTGA TAAACGTGC CATTTCCTTT GGTAAGAGAA AGCAGGTCTT 180
AATGTCTGCC AGAACACAAT TTATATGCCT TATTGGCTTC ATTAACTTT TAGAAAACTT 240
TAGCATTTGT TACTTTTTTC CATTGCATTT ACTTCAAAT GCACCTAATG AATTCGTCAC 300
CCAGTCGCAA CTTTCCCTT CTCTGTCCA TTGCTTTCTC CTTTCCCCAA CGCAGCTCGA 360
G 361

```

(2) INFORMATION FOR SEQ ID NO:495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:


```

GAATTCGGCC AAAGAGGCCT AAAGCGACCA AGATAAAAGT GGACAGAAGA ATAAGCGAGA      60
CTTTTATCC ATGAAACAGT CTCCTGCCCT CGCTCCGGA GAGCGCTACC GCAAAGCCGG      120
GTCCCCAAG CCGGTCTTGA GAGCTGATGA CAATAACATG GGCAATGGCT GCTCTCAGAA      180
GCTGGCGACT GCTAACCTCC TCCGGTTCCT ATTGCTGGTC CTGATTCCAT GTATCTGTGC      240
TCTCGTTCTC TTGCTGGTGA TCCTGCTTTC CTATGTTGGA ACATTACAAA AGGTCTATTT      300
TAAATCAAAT GGGAGTGAAC CTTTGGTCAC TGATGGTGAA ATCCAAGGT CCGATGTTAT      360
TCTTACAAAT ACAATTATA ACCAGAGCAC TGTGGTGTCT ACTGCACATC CCGACCAACT      420
AGGCCTCTTT GGCCG                                     435

```

(2) INFORMATION FOR SEQ ID NO:496:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 122 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

```

GAATTCGGCC AAAGAGGCCT AGAAATATAT TTTCTAGTGA ATTCTTATTG GAAGCCAGGT      60
CTCTCCTCTC ATTAGATCAA AAGGGACTTA TGTACATACA ACAATTGAAA GTGTTACTCG      120
AG                                     122

```

(2) INFORMATION FOR SEQ ID NO:497:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

```

GAATTCGGCC AAAGAGGCCT AAGAAAATCA GCCTGTCTGC TCTCTCCTTG GCTCAACAAG      60
GCCTCTAACA GTCTTCTGTC CTCTATTCTG CACACGGCAT ATTTGGGAAC GAGAAACAAA      120
AGTTTTCCCA AATGAAGAGA ACTCACTTGT TTATTGTGGG GATTATTTT CTGTCCTCTT      180
GCAGGGCAGA AGAGGGGCTT AATTCCCCA CATATGATGG GAAGGACCGA GTGGTAAGTC      240
TTTCCGAGAA GACCCTCGAG                                     260

```

(2) INFORMATION FOR SEQ ID NO:498:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 48 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

```

GAAAGAGGCC TACCAACATG CCAGAGGCCG TACCCATATC CGCAGCAG      48

```

(2) INFORMATION FOR SEQ ID NO:499:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

GAATTCGGCC	TTCATGGCCT	ACCCTGTCAA	AATTTTGCCT	CCTCTTGATT	TTCAATATAT	60
ATATATTTTT	TTGTCTTACT	CTGTTGCCCA	GGCTAGAGTG	CAGTGACGTG	ACCTTGGCTC	120
ACTGCAACCT	CTGCCTCCTG	GGCTCAAGCA	ATCCTCCCAC	CTCAGCCTCC	TCAGTAGCTG	180
GGACCACAGG	CATATGCTAC	AAAGCCCAGA	TTATTTTTTT	ATAGAAACAG	GGTTTCACCA	240
TGTTGCCCAG	GCTTGTCTCG	AACCCCAGAA	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:500:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 301 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

GAATTCGGCC	TTCATGGCCT	ACAAATGCCC	ATCAAAGACT	GGATAAAGAA	AATGTAGTAT	60
ATATATATAT	ACCATGGAAT	ACTGTGCAGC	CATAAAAAAG	GAATGAGATC	ATGTGTTTCA	120
CAGGGATGTG	GATGAAGCTG	GAAGCCATCA	TCCCAGCAG	ACTAACACAG	GAACAGAAAA	180
CCAAACACTG	CATGTTCTCA	CTCATAAGTG	GGAGCTGAAC	AATGAGAACA	GGTGGGCACA	240
GGGACGGGAA	CAACACACAC	CAGGGCCTGT	TGTGTGGTGG	GGGTGAGGGT	TGGAACTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:501:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

GCGAGGCAGG	GAAACTCACT	TCACGTCTCT	TTCCTTG TAG	AGCATCATGC	TTATTTCTGG	60
CTCACTCACA	TCTTGTCTC	GGGAGTTCTC	TGCCGAGCCA	TTGCCCCCTA	CAGCAGAGAG	120
CACAGCTGGC	TGCACTAGTG	CTGAAGGAGC	CAGCCCCAGA	GCAGGGCATT	TCCAGGGGCT	180
CTTGTCCCAG	AGCGGCAGGC	GTTGTGTGCA	GAGAACGCCC	CTCCCACGCA	GCACAGAGAA	240
CGCGGGGTGG	GTGTGTGGCT	CCGGGCCTGT	GGGGCTTAGG	CTGCCTGAAC	CACCGCCGAC	300
TGGCACCATG	ACTCGGCATT	CCTGGAAGTG	CCTTACCAAG	TTGTTGTTGT	TGTTTTGTTG	360
TTTTTTAAGA	GACGGGCTTG	CTCTATCATC	CAGGCTCGAG			400

(2) INFORMATION FOR SEQ ID NO:502:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 286 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

```
GAGATAACA AAATTGATTG CCCCATCTC TCACTTCCCC ATCTTGCTT CCTAGACCCC      60
ACAGAGTTAA AACTTGGGAT TCCCCTGGCC CCCCAGAAC ACTTGATAT TGTTTGTTG      120
AGGTCGTGC CGCAGTAACA GACACAGTAT TTAATTGCAC ATACAGATGT TTGCTGGGTA      180
TATCACTGT AAATTTTATT TAATCTGTT TTTGTTTGT TTGGGGGTTA TTTGGGGGGA      240
GGTTGGTTTT GTTTTAAAT ATAAAAAAA AAATCTGTCA CTCGAG                      286
```

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 279 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

```
GGCCTCACCT TACCCAGGA CTCCGCTATG ACACCGCCTC TGCCCTACA AGACACAGAT      60
CTCTCGTCAG CCTCAAAGCC TGTGGCTGCA GCCACGCCTG TGTCCTAGCA GGCTGAAGAG      120
GGCCTCACCT TACCCAGGA CTCCGCTATG ACAGCACCTC TGCTCTGCA AGACACAGGC      180
CCCACTCAG GTCCAGAGCC TCTGGCTGTG GCCACCCCTC AAACCTTGCA GGCAGAAGCA      240
GGCTGTGCCC CAGGGACAGA GCCTGTGGCC ATACTCGAG                      279
```

(2) INFORMATION FOR SEQ ID NO:504:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 306 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

```
GCAATGGCAG GAATTGAAA TATTGGCATA TGGTTCTTTT GGATTAGATT ATATAAAATC      60
AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTCTCT GCATGATACT TCTGCTTATT      120
GTCCTTACA CTAGCTACAT GATTATAGT CTTGCTCCC AATATGTAT GTATGGAAGC      180
CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCTT      240
TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTAAGT TACCCGACG      300
CTCGAG                      306
```

(2) INFORMATION FOR SEQ ID NO:505:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

```

GAATTCGGCC TTCATGGCCT AAGGAGAATG GCGTGCACCC GGGAGGCGGA GCTTGCAGTG      60
AGCCAACATC ACGCCACTGC ACTCCAGCCC GGGCGACTGA GCGAGACTCT CTCTCNAAAA      120
AAAAAAAAAA AAAGAAAAAG AAAAAAGAAA AGAAAAAGAA AAGAAAATAT ATANATACAC      180
ACAGAGAGTG AGAGAGAGAG AGAGAGAGAG ACCAGAAAAA GAGAGAAGGA GAAAGAGAGA      240
ATGCAAAAAC CAAGAGGANA GAATGATCCA CTCTCCAAC AGAAAGGTAG CTCTCAATCT      300
GAAAAGTCAC TTGATTACTT TGTCTATTTT GCTTATCTGC TACATCAATG GTTCCCTCGA      360
G

```

(2) INFORMATION FOR SEQ ID NO:506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

```

GAATTCGGCC TTCATGGCCT AGGCCTTTTC TTTTAAAGG AATTCAAGCA GGATACGTTT      60
TTCTGTTGGG CATTGACTAG ATTGTTTGCA AAAGTTTCGC ATCAAAAACA ACAACAACAA      120
AAACCAAAC AACTCTCCTT GATCTATACT TTGAGAATTG TTGATTTCTT TTTTATTATC      180
TGACTTTTAA AAACAACCTT TTTTCCACT TTTTAAAAA ATGCACTACT GTGTGCTGAG      240
CGCTTTTCTG ATCCTGCATC TGGTCACGGT CGCGCTCAGC CTGTCTACCC GCAGCACACT      300
CGAG

```

(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

```

GGGGCTGCGG GGATTGACCT CCTCACTTCT GGGTTGCCAC TCGAAGCTTG CTCGGGGCAA      60
CGACCCTGCT GCTTCCCAGA GGGAACTGT AGCCACAGA CCAGGAGAGA AGCCAAAGCA      120
CCTGCTCCAC GTCCACATCA CCCCAGGCTT CTAGCCCCCA GGGGCTTCAT CAGTGCTTCA      180
GCGCTCTCTC CCATCCCCCA CTCCCCATGT CCCTCGTGAT CCGAACTCCT AGGGCTCCGT      240
GTCCCACAGG TCACCACTTC CGGCTGTCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

GAATTCGGCC TTCATGGCCT ACATCAATAA AATACATTCT ACACAGAATA CGCCAACCAT	60
ACACTACTCT TTTTGTATAA TAAAAAATGT ATTTACTGAG CCAGTTGTGG TGGCTCGCGC	120
CTATAATCCC AGCACCTTGG AAGGCCAATG GGAGTGGATC GGTGAGGCC AGGAGTTTGA	180
GACCGGCCTG GCCAACATGG TGAATGCCG TCTCTACTGA GAATGCAGAA ATGAGCCGGG	240
CACGGTGGCA CGCACCTGTA GTCCCAGGTA CTCCGATTCC TCTCGAG	287

(2) INFORMATION FOR SEQ ID NO:509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

AAGAGGCGAT GCGGCGCATG GCATCTCTCG GCGCCCTGGC GCTGCTCCTG CTGTCCAGCC	60
TCTCCCGCTG CTCAGCCGAG GCCTGCCTGG AGCCCCAGAT CACCCCTTCC TACTACACCA	120
CTTCTGACGC TGTCAATTCC ACTGAGACCG TCTTCATTGT GGAGATCTCC CTGACATGCA	180
AGAACAGGGT CCAGAACATG GCTCTCTATG CTGACGTCGG TGGAAAACAA TTCCCTTGTC	240
CACTCGAG	248

(2) INFORMATION FOR SEQ ID NO:510:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

GGCGATGATT AGGCCAGACC CTCCCCATCC TCGTGAGGGC CAGAAGCTGT TGCTACACTG	60
TGAGGGTCGC GGCAATCCAG TCCCCAGCA GTACCTATGG GAGAAGGAGG GCAGTGTGCC	120
ACCCCTGAAG ATGACCCAGG AGAGTGGCCT GATCTTCCCT TTCCTCAACA AGAGTGACAG	180
TGGCACCTAC GGCTGCACAG CCACCAGCAA CATGGGCAGC TACAAGGCCT ACTACACCCT	240
CAATGTTAAT GACCCAGTC CGGTGCCCTC CTCCTCCAGC ACCTACCAGC CCATCATCGG	300
TGGGATCGTG GCTTTCATTG TCTTCCTGCT GTCATCATG CTCATCTTCC TCGGCCACTA	360
CTTGATCCGG CACAAAGGAA CCTACCCTAC ACTCGAG	397

(2) INFORMATION FOR SEQ ID NO:511:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

```

GCCTGCCTCC AGGCCTTTGC TCCCACTGTT GCCTCCACTT AGAATAACAT TCCACCCCAT      60
CTCTATAAAT ATCCTACAGA CAAATACTAC CTTCCCCTTA AGGCCAGTTC TAACCCTAAC      120
TGACAACAAA TCATCTCTAC ATGATCTTTT CCTTCTGGGA ATGCCTGCAG CACTGTTTAA      180
TCCTGCCCCA CCACCATCCC CTCACCCAGC ACCCTCTCCC AGACCAGACA GGGTGGCTCA      240
TGCCTGCAAT CCCAGCACCT TGGGAGGCTG AGGCAGGAGG ATTGCTCGAG      290

```

(2) INFORMATION FOR SEQ ID NO:512:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

```

GAATTCGGCC TTCATGGCCT ACTATGCCGT CATGATAGAG AAGATGATCC TGAGAGACCT      60
GTGCCGTTTC ATGTTGTCT ACGTCGTCTT CTGTTCGGG TTTCCACAG CGGTGGTGAC      120
GCTGATTGAA GACGGGAAGA ATGACTCCCT GCCGTCTGAG TCCACGTCGC ACAGGTGGCG      180
GGGGCCTGCC TGCAGGCCCC CCGATAGCTC CTACAACAGC CTGTACTCCA CCTGCCTGGA      240
GCTGTTCAAG TTCACCATCG GCATGGGCGA CCTGGAGTTC ACTGAGAACC ATGAACCTCT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:513:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 314 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

```

GAATTCGGCC TTCATGGCCT AGGAACCTGG ACCGCGGCGG CGCCGGGTTT CCCTCATGAT      60
CCCGGGCGGG CGCGGGCGGC GGCAGAGGCG GCGGGAGGAT GACCTCTTAC CGGGAGCGGA      120
GTGCCGACCT GGCCCGTTTC TACACTGTCA CCGAGCCCCA GCGACACCCG AGGGGCTACA      180
CAGTATATAA GGTACCGGCC CGGGTTGTTT CACGAAGAAA TCCAGAGGAT GTCCAGGAGG      240
GAGAATCCTG AACCAACCTA TCCATGAACA TACTCTCTGC CATTTTCTTA GTCCTTTTTT      300
CGGAAAAACT CGAG                                     314

```

(2) INFORMATION FOR SEQ ID NO:514:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 529 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

```

GAATTCGGCC TTCATGGCCT ACGAACTTAA GAAAATGAGA CTGAGCAATC TCATGGTTCT      60
TGGACAGTTA GTCTATGGCC AATTGATGGA ACCAGTAAAT CGAGAGAACT TTACGCAGAC      120
CTTGCCCAAA ATGCCAATTC ATTCTCATGC ACAGCCCCCA GATGCCAGGG AAGAGGATAT      180

```

CATACTTGAA	GGTCAACAGA	GCCTGCCATC	CCAGGCTTCA	GATTGGAGCC	GATACTCAAG	240
CAGCTTACTG	GAATCCGTCT	CTGTTCTGG	AACACTAAAT	GAGGCTGTTG	TAATGACTCC	300
ATTTTCATCG	GAACCTTCAAG	GAATTTTCAAG	ACAGACCCTC	CTGGAGCTGT	CCAAAGGAAA	360
GCCCTCCCCG	CATCCCAGAG	CCTGGTTTGT	GTCTCTTGAT	GGAAAGCCAG	TTGCACAAGT	420
GAGGCACTCC	TTTATAGACC	TGAAAAAGGG	CAAGAGAACC	CAGAGCAATG	ACACCAGTCT	480
GGACTCTGGG	GTGGACATGA	ATGAGCTTCA	CTCAAGTAGA	AAGCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:515:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 352 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

GGAGATGAAA	GTAAAAAGTG	AAAACCTTAA	AGAGGAGCCT	CAGTCTTCTG	AAGAAGAATC	60
TATGTCTTCT	GTGGAAACCA	GGACACTAAT	AAAATCTGAG	CCTGTAAGTC	CAAAGAATGG	120
TGTTTTACCA	CAGGCTACTG	GAGACCAGAA	ATCTGGTGGA	AAATGTGAAA	CAGACAGACG	180
CATGGTTGCA	GCCAGAACAG	AACCCCTAAC	TCCAAACCCA	GCTTCTAAGA	AACCAAGAGT	240
CCACAAAAGG	GGATCAGAAT	CTAGTTCTGA	TTCTGACTCA	GATTCTGAGA	GATCATCTTG	300
TTCTTCCAGA	TCATCTTCTT	CCTCATCATC	CTCTTCTTGT	CCCACTCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:516:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 500 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

GTCTACACCN	TTCCGAGTTG	GCTGCAGATT	TGTGGTGCGT	TCTGAGCCGT	CTGTCCTGCG	60
CCAAGATGCT	TCAAAGTATT	ATTAAAAACA	TATGGATCCC	CATGAAGCCC	TACTACACCA	120
AAGTTTACCA	GGAGATTTGG	ATAGGAATGG	GGCTGATGGG	CTTCATCGTT	TATAAAATCC	180
GGGTGCTGA	TAAAAGAAGT	AAGGCTTTGA	AAGCTTCAGC	GCCTGCTCCT	GGTCATCACT	240
AACCAGATTT	ACTTGAGTA	CATGTGAAAG	AAAACGTCAG	TCTGCCTGTA	AATTTACAGCA	300
AGCCGTGTTA	GATGGGGAGC	GTGGAACGTC	ACTGTACACT	TGTATAAGTA	CCGTTTACTT	360
CATGGCATGA	ATAAATGGAT	CTGTGAGATG	CACTGCTACC	TGGTACTGCT	TTCAGTGTGT	420
TCCCCCTCAG	CCCCCCGGC	GTGTCAGGCA	TACTCTGAGT	AGATAATTTG	TCATGCAGCG	480
CATGCAATCA	GAATCTCGAG					500

(2) INFORMATION FOR SEQ ID NO:517:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 427 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

GAATTCGGCC	TTCATGGCCT	AGATGCTCAA	CACCTCCTCC	TTGGTGGAGC	AGCTGAACGA	60
GCAGTTTAAC	TGGGTGTCCC	GGCTGGCAAA	CCTCACGCAA	GGCGAACACC	AGTACTATCT	120
GCGGGTCACC	ACGGTGGCTT	CCCACACTTC	TGACTCGGAC	GTTCTTCCG	GTGTCACTGA	180
GGTGGTCGTG	AAGCTCTTTG	ACTCTGATCC	CATCACTGTG	ACGGTCCCTG	TAGAAGTCTC	240
CAGGAAGAAC	CCTAAATTTA	TGGAGACCGT	GGCGGAGAAA	GCNCTGCAGG	AATACCGCAA	300
AAAGCACCGG	GAGGAGTGAG	ATGTGGATGT	TGCTTTTGCA	CCTACGGGGG	CATCTGAGTC	360
CAGCTCCCCC	CAAGATGAGC	TGCAGCCCCC	CAGAGAGAGC	TCTGCACGTC	ACCAAGTAAC	420
TCTCGAG						427

(2) INFORMATION FOR SEQ ID NO:518:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

GAATTCGGCC	TTCATGGCCT	AATCTTAAGG	GACCTTTCCT	TACTACAGAT	TCAAATGCGA	60
GATCTTGAGG	GTTACAGGGA	AACGAGGTAT	CAGTTACTTC	AGCTTCGACC	TGCGCAGAGA	120
GCATCATGGA	TTGGTTATGC	TATTGCTTAC	CATTTATTAG	AAGATTATGA	AATGGCAGCA	180
AAGATTTTAG	AAGAATTTAG	GAAAACACAA	CAGACATCCC	CTGACAAGGT	GGATTATGAA	240
TATAGTGAAC	TACTCTTATA	TCAGAATCAA	GTTCTTCGGG	AAGCAGGTCT	CTATAGAGAA	300
GCTTTGGAAC	ATCTTTGTAC	CTATGAAAAG	CAGATTTGTG	ATAAACTTGC	TGTAGAAGAA	360
ACCAAAGGGG	AACCTTCTGTT	GCAACTATGT	CGTTTGGAA			399

(2) INFORMATION FOR SEQ ID NO:519:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

GAATTCGGCC	TTCATGGCCT	ACTTATCTTA	ATCCAATGGG	TGACATCTTC	AACAACCCTG	60
TTCCAAATAA	GGCTGCATTC	TAAACACTAG	GGATTAAGAC	ATCAACATGT	GAATTTTGGA	120
GGAATGTAGT	TCTAACCATA	ACAGCAGTGA	ATGAGATGAC	AGACTATTGC	TCTCAAAGAA	180
TAGCCAGGTT	TCTAGTTTCC	TTAGGCATTT	TCTGGAGGTT	TGCGAGCAGT	TCATTATTAT	240
CTTAAAAATA	TTATCCAGAG	CTGTGGTCTA	TCAGCAGCTC	ATTACCAGAC	TGGCAGATAC	300
ATTTAATCAG	CAAAAGAGTT	GTTCTGTGA	TTAGCATCCT	CCTGGTTTCC	CAGCTCAAGA	360
GTTCTTCTGA	GTAATAGTAA	TCCTTCCCCC	ATGCTCGAG			399

(2) INFORMATION FOR SEQ ID NO:520:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

GCTGAAGTGG	TGACTTTTGA	GAGAGGACAC	AAAATTATCA	TCAGCTCCAG	TCGGAGAATC	60
CAGAAAGGAG	AAGAGGTAAG	AGTGTGAGAG	ATTGCATCTG	CCATGTTGTT	CAGATCCTGG	120
GCGAATAGTT	CCCTCCTCAC	ACAGGTCAC	TACTCACTTG	TTCCCAATT	CTTTGTTGTG	180
ATAAAACTC	TGTCCATAAT	AGGCCAGATG	TTCCCACCCT	GCAGTATCTC	ACCCCTTCAGG	240
CACTCCAGTT	CACCTTCCTC	CACATCCCTC	GAG			273

(2) INFORMATION FOR SEQ ID NO:521:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

GCTTTAAGAA	TTAACGAAAG	CAGTGTCAAG	ACAGTAAGGA	TTCAAACCAT	TTGCCAAAAA	60
TGAGTCTAAG	TGCATTACT	CTCTTCCTGG	CATTGATTGG	TGGTACCAGT	GGCCACTACT	120
ATGATTATGA	TTTTCCCCTA	TCAATTTATG	GGCAATCATC	ACCAAAGTGT	GCACCAGAAT	180
GTAAGTCCC	TGAAAGCTAC	CCAAGTGCCA	TGTACTGTGA	TGAGCTGAAA	TTGAAAAGTG	240
TACCAATGGT	GCCTCCTGGA	ATCAAGTATC	TTTACCTTAG	GAATAACCAG	ATTGACCATA	300
TTGATGAAAA	GGCCGCACTC	GAG				323

(2) INFORMATION FOR SEQ ID NO:522:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

GGAAAAAGAA	GAGAAAGCCA	AGGAAGACAA	GGGCAAACAA	AAGTTGAGGC	AGCTTCACAC	60
ACACAGATAC	GGAGAACCAG	AAGTGCCAGA	GTCAGCATTC	TGGAAGAAAA	TCATAGCATA	120
TCAACAGAAA	CTTCTAACT	ATTTGCTCG	CAACTTTTAC	AACATGAGAA	TGTTAGCCTT	180
ATTTGTCGCA	TTTGCTATCA	ATTTTCATCT	GCTCTTTTAT	AAGGTCTCCA	CTTCTTCTGT	240
GGTTGAAGGA	AAGGAGCTCC	CCACGAGGCT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:523:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

GCCCCAGTCC	AGATCCAGGA	CTGAGATCCC	AGAACCATGA	ACCTGGCCAT	CAGCATCGCT	60
CTCCTGCTAA	CAGTCTTGCA	GGTCTCCCGA	GGGCAGAAGG	TGACCAGCCT	AACGGCCTGC	120
CTAGTGGACC	AGAGCCTTCG	TCTGGACTGC	CGCCATGAGA	ATACCAGCAG	TTCACCCATC	180

CAGTACGAGT TCAGCCTGAC CCGTGAGACA AAGAAGCACC TGCTCTTTGG CACTGTGGGG 240
 GTGCCTGAGC ACACATACCG CTCCTCCTC GAG 273

(2) INFORMATION FOR SEQ ID NO:524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

GAATTCGGCC TTCATGGCCT ACTCTCCTAT AAAGCAGACG CCGCGCCGCG CTGCGACGCT 60
 GTAGTGGCTT CGTCTTCGGT TTTTCTCTTC CTTCGCTAAC GCCTCCCGGC TCTCGTCAGC 120
 CTCCCGCCGG CCGTCTCCTT AACACCGAAC ACCATGCCTT CAATTAAGTT GCAGAGTTCT 180
 GATGGAGAGA TATTTGAAGT TGATGTGGAA ATTGCCAAAC AATCTGTGAC TATTAAGACC 240
 ATGTTGGAAG ATTTGGGAAT GGATGATGAA GGAGATGATG ACCCAGTTCC TATACCAAAT 300
 GTGAATGCAG CAATATTAAA AAAGGTCATT CAGTGGTGCA CCCACCACAA GGATGACCCT 360
 CCTCCTCTG AAGATGATGA GAACAAAGAA AAGCGAACAG ATGATATCCC TGTTTGGGAC 420
 CAAGAATTCC TGAAAGTTGA CTAAGGAACA CTCGAG 456

(2) INFORMATION FOR SEQ ID NO:525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

GAATTCGGCC TTCATGGCCT AATGGGACAA CTCCTCGCCC TCTACCTGTC CCCTCCCCCT 60
 TTGGTTGTAT GATTTTCTTC TTTTAAAGA ACCCTGGAA GCAGCGCCTC CTTCAGGGTT 120
 GGCTGGGAGC TCGGCCCATC CACCTCTTGG GGTACCTGCC TCTCTCTCTC CTGTGGTGTG 180
 CCTTCCCTCT CCCATGTGCT CGGTGTTTCTG TGGTGTATAT TTCTTCTCCC AGACATGGGG 240
 CACACGCCCC AAGGGACATG ATCCTCTCCT TAGTCTTAGC TCATGGGGCT CTTTATAAGG 300
 AGTTGGGGGG TAGAGGCAGG AAATGGGAAC CGAGCTGAAG CAGAGGCTGA GTTAGGGGGC 360
 TAGAGGACAG TGCTCCTGGC CACCCAGCCT CTGCTGAGAA CCATTCCTGG GATTAGAGCT 420
 GCCTTTCCCA GGGAAAAAGT GTCCGACTCG AG 452

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

GCGATTGAAT TCTAGACCAG ACTCGTCTCA GGCCAGTTGC AGCCTTCTCA GCCAAACGCC 60
 GACCAAGGAA AACTCACTAC CATGAGAATT GCAGTGATT GCTTTTGCCT CCTAGGCATC 120

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ACCTGTGCCA TACCAGTTAA ACAGGCTGAT TCTGGAAGTT CTGAGGAAAA GCAGCTTTAC 180
AACAAATACC CAGATGCTGT GGCCACATGG CTAACCCCTG ACCCATCTCA GAAGCAGAAT 240
CTCCTAGCCC CACAGACCCT TCCAAGTAAG TCCAACGAAA GCCATGACCA CATGGATGAT 300
ATGGATGATG AAGATGATGA TGACCATGTG GACAGCCAGG ACTCCATTGA CTCGAATCGA 360
CTCGAG 366

```

(2) INFORMATION FOR SEQ ID NO:527:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 408 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

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GCCCCAGTCC AGATCCAGGA CTGAGATCCC AGAACCATGA ACCTGGCCAT CAGCATCGCT 60
CTCCTGCTAA CAGTCTTGCA GGTCTCCCGA GGGCAGAAGG TGACCAGCCT AACGGCCTGC 120
CTAGTGGAAC AGAGCCTTCG TCTGGACTGC CGCCATGAGA ATACCAGCAG TTCACCCATC 180
CAGTACGAGT TCAGCCTGAC CCGTGAGACA AAGAAGCACG TGCTCTTTGG CACTGTGGGG 240
GTGCCTGAGC ACACATACCG CTCCCGAACC AACTTCACCA GCAAATACAA CATGAAGGTC 300
CTCTACTTAT CCGCCTTCAC TAGCAAGGAC GAGGGCACCT ACACGTGTGC ACTCCACCAC 360
TCTGGCCATT CCCCACCCAT CTCCTCCAG AACGTTACAG TGCTCGAG 408

```

(2) INFORMATION FOR SEQ ID NO:528:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 403 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

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GTAGGTCACA GCAGAAGCAG CCAAAATGGA TCCCCAGTGC ACTATGGGAC TGAGTAACAT 60
TCTCTTTGTG ATGGCCTTCC TGCTCTCTGG TGCTGCTCCT CTGAAGATTG AAGCTTATTT 120
CAATGAGACT GCAGACCTGC CATGCCAATT TGCAAACTCT CAAAACCAAA GCCTGAGTGA 180
GCTAGTAGTA TTTTGGCAGG ACCAGGAAAA CTTGGTTCTG AATGAGGTAT ACTTAGGCAA 240
AGAGAAATTT GACAGTGTTT ATTCCAAGTA TATGGGCCGC ACAAGTTTTG ATTCGGACAG 300
TTGGACCCTG AGACTTCACA ATCTTCAGAT CAAGGACAAG GGCTTGTATC AATGTATCAT 360
CCATCACAAA AAGCCACAG GAATGATTCT CATCCACCTC GAG 403

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(2) INFORMATION FOR SEQ ID NO:529:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 475 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

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GAATTCCTCT TCTTTACCCT CGTCCTGCCG GGCACCTTCC TTAGGTTTGG TTTTCATCTAC 60

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AGCTTCTATG	TTCTCTTCAG	CTTGGCTGCT	CTCCCCAGTC	TCCGTTGGAG	GCTGGGCTGT	120
TGCCTTGGCA	GCAGCATCCT	CTGCGGCAGG	GGTGGTGGCA	GCAGCAGCAG	TGACAGCAGC	180
AGGCACATCG	GCTTGTTTAG	GCTCCTCCTT	GGCTGGGGCA	TCTTCAGCCT	TGGAGGACGG	240
CGAGTTATCA	GTGGAAGCTT	TAGTGGCACT	TTCTGTCTCA	GCTGAGCCGG	CCTTCTCCTC	300
TGAGGATGCA	GGAGCCTGGG	GGGCTACCTG	CTCTGTGGCA	GCATCACCCCT	CCCCCTTTT	360
CTCCTCGGAA	GGAGTTTCTC	CTGCTTTGCC	GGGCTCATCA	GGCTTGGAGC	CAGTGGCTGG	420
GGCTGCTTCG	GCAGTAGTGG	TGCCTTCTCC	CTTCTTCTCC	ACCCCATCGC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:530:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

GTGCTGGCGG	ACATGGACGT	GGTGAATCAG	CTGGTGGCTG	GGGGTCAGTT	CCGGGTGGTC	60
AAGGAGCCCC	TCGGCTTTGT	GAAGGTGCTG	CAATGGGTCT	TCGCCATCTT	CGCCTTTGCC	120
ACATGCGGCA	GCTACAGTGG	GGAGCTCCAG	CTGAGCGTGG	ATTGTGCCAA	CAAGACCGAG	180
AGTGACCTCA	GCATCGAGGT	CGAGTTCGAG	TACCCCTTCA	GGCTGCACCA	AGTGTACTTT	240
GATGCACCCA	CCTGCCGAGG	GGGCACCACC	AAGGTCTTCT	TAGTTGGGGA	CTACTCCTCG	300
TCAGCCGAAT	TCTTTGTCAC	CGTGGCCGTG	TTTGCTTCC	TCTACTCCAT	GGGGGCTCTG	360
GCCACCTACA	TCTTCTGCA	GAACAAGTAC	CGAGAGAATA	ACAAAGGGCC	CATGCTGGAC	420
TTTCTGGCCA	CGGCTGTGTT	CGCCTTCATG	TGGCTAGTTA	GCTCATCGGC	ATGGGCCAAG	480
GGGCTGTCAG	ATGTGAAGAT	GGCCACAGAC	CCAGATGAAC	TCGAG		525

(2) INFORMATION FOR SEQ ID NO:531:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

GCAAACAGAC	AAGGCTTACA	GGTTAGTTCA	GGATCTGCGC	CTTATCAAGC	AAATTGTTTT	60
GCCTATCCAA	CCTGCGGTGC	CAAACCCATA	TACTCTCCTA	TCCTCAATAC	CTCCCTCCAC	120
AACCCCTCCA	TAACCCATTA	TTCGGTTCTG	GATCTCAAAC	ATGCTTTCTT	TGCTATTCTT	180
TTGCATCCTT	CATCCCAGCC	TCTCTTGTCT	TTCATTGGG	CTGGCCCTGA	CACCCATCAG	240
CCTCAGCAAC	TTACCTGGGC	TGTACTGCCA	CAAGCCTTCA	CGGACAGCCC	CCATTACTTC	300
AGTAGCCCTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

```

GAGACTATCG CCTATACTTT ATTTGGGTAA ATGGTTTGGT TAAGGTTGTT TGGTGGTAGC      60
TGGTTGGGTT GCTGGGGCTC GGTTGTGTGA GTCGCGATGT TCTTCTCCGA GGCCAGAGCC      120
AGGTCGCGGA CGTGGGAAGC CAGTCCCTCG GAACACAGGA AGTGGGTGGA AGTATTTAAA      180
GCATGTGATG AAGATCACAA AGGATATCTC AGCAGAGAGG ACTTTAAAAC TGCTGTTGTA      240
ATGCTGTTTG GGTACAAGCC CTCCAAGATA GAAGTGATT CTGTGATGTC TTCAATAAAT      300
CCAAATACTT CTGGTATATT ACTCGAG                                         327

```

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

```

GCCTGCCCCC ACCTTACAGG TCTGGGATGT ACCTTTCCAT CTGTTGCTGC TTTCTTCTAT      60
GGGCCCCCTGC CCTCACTCTC AAGAACCTCA ACTACTCCGT GCCGGAGGAG CAAGGGGCCC      120
GCACGGTGAT CGGAACATC GGCAGGGATG CTCGACTGCA GCCTGGGCTT CCGCCTGCAG      180
AGCGCGGCGG CGAGGGGCGC AGCAAGTCGG GTAGTACCG GGTGCTGAG AACTCCGCAC      240
CGCACCTGCT GGACGTGGAC GCAGACAGCG GGCTCCTCTA CACCAAGCAG CGCATCGACC      300
GCGAGTCCCT GTGCCGCCAC AATGCCAAGT GCCAGCTGTC CCTCGAG                                         347

```

(2) INFORMATION FOR SEQ ID NO:534:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

```

GGTAGGACCG GCGAGGAATA GGAATCATGG CGGCTGCGCT GTTCGTGCTG CTGGGATTCG      60
CGCTGCTGGG CACCCACGGA GCCTCCGGGG CTGCCGGCAC ATTCTTCACT ACCGTAGAAG      120
ACCTTGGCTC CAAGATACTC CTCACCTGCT CTTTGAATGA CAGCGCCACA GAGGTCACAG      180
GGCACCCTG GCTGAAGGGG GGCCTGGTGC TGAAGGAGGA CGCGCTGCCC GGCCAGAAAA      240
CGGAGTTCAA GGTGGACTCC GACGACCACT GGGGAGAGTA CTCCTGCGTC TTCCTCCCCG      300
AGCCCATGGG CACGGCCAAC ATCCAGCTCC ACGGGCCTCC CAGAGTGAAG GCTGTGAAGT      360
CGTCAGAACA CATCNACGAG GGGGAGACGG CCATGCTGCT CTGCAAGTCA GAGTCCGTGC      420
CACCTGTCAC TGAATGGGCC TGGTACAAGA TCACTGACTC TGAGGACAAG GCCCTCATGA      480
ACGGCTCCGA GAGCAGAGTT CTCGAG                                         506

```

(2) INFORMATION FOR SEQ ID NO:535:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

```

GAATTCCTCT TCTTTACCCT CGTCCTGCCG GGCACCTTCC TTAGGTTTGG TTTCATCTAC      60
AGCTTCTATG TTCTCTTCAG CTTGGCTGCT CTCCCCAGTC TCCGTTGGAG GCTGGGCTGT      120
TGCCTTGGCA GCAGCATCCT CTGCGGCAGG GGTGGTGGCA GCAGCAGCAG TGACAGCAGC      180
AGGCACATCG GCTTGTTTAG GCTCCTCCTT GGCTGGGGCA TCTTCAGCCT TGGAGGACGG      240
CGAGTTATCA GTGGAAGCTT TAGTGGCACT TTCTGTCTCA GCTGAGCCGG CTTTCTCCTC      300
TGAGGATGCA GGAGCCTGGG GGGCTGCCTG CTCTGTGGCA GCATCACCTT CCCCCTTCTT      360
CTCCTCGGAA GGAGTTTCTC CTGCTTTGCC GGGCTCATCA GGCTTGGAGC CAGTGGCTGG      420
GGCTGCTTCG GCAGTAGTGG TGCCTTCTCC CTTCTTCTCC ACCCCATCGC TCGAG          475

```

(2) INFORMATION FOR SEQ ID NO:536:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

```

GAATTCGCCT TCATGGCCTA CAAGCTCTAG CCTAGACCTT TAGTGTGCCA TGCAGTCACA      60
GGTCTGAAAA GCAGCATCAT CCAAACCTTA CTTAATCTCT AAAATCTCAG CTGGTGGACA      120
GCTCATGATT AGTTCAGCCC ACTTCCTCCC CTTAGTTGA GTTTGCAGCA GGACGCAGGA      180
GATAAGCACT TCCAAGCAAG TCTGATTAT ATATCAAAC CGGTCTCCAT CCCAGGCCAG      240
CTGACCCTCA GAGCCAGCAA TGCTCTGTGC TTCCTCCCTG CGTCACGGCT TGGCAAGAGC      300
TGCTCTGCT GAGCAGTGTG TGTGATGGAG ACGGAGGCCG CTGAAGGCCG AGTGCTTGCA      360
GGCTGTGAA CTGCCATCGA ACACAATCCA AACTCTGGAA ATGTCCTGA CCACCTAAGC      420
CCTCAACAAC GTAATGCCTG TAGTGTCTNT TTNTCAGTAA ACTCCTTGCT CATGTCNATA      480
AAGTATCCCT GAACACTCGA G                                501

```

(2) INFORMATION FOR SEQ ID NO:537:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

```

GCGGGCACCA TTCCAGTAT GTACCAAACC AAAGCCGTCA TCATTGCAAT GATCATCACT      60
GCGGTGGTAT CCATTTCAGT CACCATCTTC TGCTTTCAGA CCAAGGTGGA CTTACCTCG      120
TGCACAGGCC TCTTCTGTGT CCTGGGAATT GTGCTCCTGG TGA CTGGGAT TGTCACTAGC      180
ATTGTGCTCT ACTTCCAATA CGTTTACTGG CTCCACATGC TCTATGCTGC TCTGGGGGCC      240
ATTTGTTTCA CCCTGTTCTT GGCTTACGAC ACACAGCTGG TCCCGGGGAA CCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:538:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

```

GCTCCACCAG CTACTGAGAA AATGGCCTGT AAAGATCCAG AAAAACCCAT GGAGGCCTGT      60
GCCTCAGCAC ATGTGCAACC CAAGCCTGCC CCTGAAGCCA GTAGCCTAGA GGAGCCCCAT      120
AGCCCAGAAA CAGGGGAGAA GGTAGTAGCA GGAGAGGTAA ACCCACCCTAA TGGCCCTGTG      180
GGGGACCCAC TGAGCTCTT GTTTGGGGAT GTGACATCCC TGAAAAGCTT TGATTCATTG      240
ACAGTTGTG GTGACATAAT AGCAGAACAA CTCGAG                                276

```

(2) INFORMATION FOR SEQ ID NO:539:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

```

GAATTCGGCC TTCATGGCCT AGCCAGACAA CTTGTACTGA TCTTTCTTTG CTTGCCTAC      60
TAATCACACA CACCCTCTCT TCTAGCCTGT GAAGACTTAA CTGATTTTCT ACGGATGAAG      120
GTTTCAGTGT CCAAGGCC CATAACGTAT CTGATTTTAC TTTATTTTGT TTTGTTAAGC      180
GTAACAGCTT CTGAGGAGCC ACGTAGAGCT CAAGAAGCAA AAGCTACTGA GAGTAGATGC      240
TATGTAACT GCACAAGACG TCTCGAG                                267

```

(2) INFORMATION FOR SEQ ID NO:540:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

```

GAATTCGGCC TTCATGGCCT ACAAAAAGAT GCTGGACAAG GCGTTTGCAG AGCGGATCAT      60
CCATGACTAC AAGGATATTT TCAAACAAGC AACTGAAGAC AGGCTCACCA GTGCCAAGGA      120
ACTGCCCTAT TTTGAAGGTG ATTTCTGGCC CAATGTGTTA GAAGAGAGCA TTAAGGAACT      180
AGAACAAGAA GAAGAGGAGA GGAAAAAGGA AGAGAGCACT GCAGCCAGTG AAACCACTGA      240
GGGCAGTCAG GGCGACAGCA AGAATGCCNA GAAGAAGAAC NACNAGAAAA CCAACAAGAA      300
CAAAAGCAGC ATCAGCCGCG CCAACAAGAA GAAGCCAGC ATGCCCAACG TGTCCAATGA      360
CCTGTCCCAG AAACTCGAG                                379

```

(2) INFORMATION FOR SEQ ID NO:541:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

```

GAATTGGGCC TTCATGGCCT ACATAATTG AATCAACACA ACCACCCACA GCCTAATTAT      60
TAGCATCATC CCTCTACTAT TTTTAAACCA AATCAACAAC AACCTATTTA GCTGCTCCCC      120
AACCTTTTCC TCCGACCCCC TAACAACCCC CTCCTAATA CTAACCTACCT GACTCCTACC      180
CCTCACAATC ATGGCAAGCC AACGCCACTT ATCCAGTGAA CCACTATCAC GAAAAAACT      240
CTACCTCTCT AACTAATCT CCNNACAAAT CTCCTTAATT ATAACATTCA CAGCCACAGA      300
TCTCGAG                                         307

```

(2) INFORMATION FOR SEQ ID NO:542:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

```

GGATGGCGCC GCGGAGGGTC AGGTCGTTTC TCGCGGGGCT CCCGGCGCTG CTAAGTCTGC      60
TGCTCTTCCT CGGGCCCTGG CCCGCTGCGA GCCACGGCGG CAAGTACTCG CGGGAGAAGA      120
ACCAGCCCAA GCCGTCCCCG AAACGCGAGT CCGGAGAGGA GTTCCGCATG GAGAAGTTGA      180
ACCAGCTGTG GGAGAAGGCC CAGCGACTGC ATCTTCCTCC CGTGAGGCTG GCCGAGCTCC      240
ACGCTGATCT GAAGATACAG GAGAGGGACG AACTCGCCTG GAAGAACTA AAGCTTGACG      300
GCTTGACGA AGATGGGGAG AAGGAAGCGA GACTCATACG CAACACACTC GAG              353

```

(2) INFORMATION FOR SEQ ID NO:543:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

```

GGATACCCTA AAAAAACAAT CTATGTCAGA GGCTTCACTG GAGGTTACGT CACGTTATCG      60
TATTAATTTA GAAGATGAGA CACAGGATTT AAAGAAGAAA TTAGGTCAA TCAGAAATCA      120
ATTGCAAGAA GCACAGGATC GACATACAGA AGCTGTCAGA TGTGCTGAGA AGATGCAAGA      180
TCACAAGCAA AAGCTTGAAA AAGATAATGC CAAGTTAAAA GTTACAGTCA AAAAGCAAAT      240
GGACAAAATT GAGGAGCTTC AGAAAAACCT GTTAAATGCA AATTTGTCTG AAGATGAAAA      300
GGAACCTGAG                                         310

```

(2) INFORMATION FOR SEQ ID NO:544:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

```

GTTTGGATGA TTGGTGGCGT GTACGCAGCT GCTATGGCCT GGGCCATCAT CCCCCTAT      60
GGGTGGAGTT TTCAGATGGG TTCTGCCTAC CAGTTCACA GCTGGAGGGT CTTCTCTCTC      120

```



```

GTCTGCGCCT TTCCTTCTGT GTTTGCCATT GGGGCTCTGA CCACGCAGCC TGAGAGCCCC 180
CGTTTCTTCC TAGAGAATGG AAAGCATGAT GAGGCCTGGA TGGTGCTGAA GCAGGTCCAT 240
GATACCAACA TCGAGGCCAA AGGACATCCT GAGCGACTCG AG 282

```

(2) INFORMATION FOR SEQ ID NO:545:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

```

GAATTCGGCC TTCATGGCCT AGAACTTTGT ACACCATGGA ATGTTCTACT TATTATTTTG 60
TGCTACAATA TGTGCTGTTT CTTTGTGTTG AATTGCAGAT TGTCTACTAT GAAGCAGGGA 120
TTATTCTATG CTGTGTCCTG GGGCTGCTGT TTATTATTCT GATGCCTCTG GTGGGGTATT 180
TCTTTTGTAT GTGTCGTTGC TGTAACAAAT GTGGTGGAGA AATGCACCAG CGACAGAAGG 240
AAAATGGGCC CTTCTGAGG AAATGCTTTG CAATCTCCCT GTTGGTGATT TGTATAATAA 300
TAAGCATTGG CATCTTCTAT GGTTTTGTGG CAAATCACCA GGTAAGAACC CGGATCCTCG 360
AG 362

```

(2) INFORMATION FOR SEQ ID NO:546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

```

TCGAGGGACA TGAGGCTGAG CTGGTTCCAG GTCCTGACAG TACTGTCCAT CTGCCTGAGC 60
GCCGTGGCCA CGGCCACGGG GGCCGAGGGC AAAAGGAAGC TGCAGATCGG GGTCAAGAAG 120
CGGGTGGACC ACTGTCCCAT CAAATCGCGC AAAGGGGATG TCCTGCACAT GCACTACACG 180
GGGAAGCTGG AAGATGGGAC AGAGTTTGAC AGCAGCCTGC CCCAGAACCA GCCCTTTGTC 240
TTCTCCCTTG GCACAGGCCA GGTCACTAAG GGCTGGGACC AGGGGCTGCT GGGGATGTGT 300
GAGGGGGACC TCGAG 315

```

(2) INFORMATION FOR SEQ ID NO:547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

```

GAATTTTAAT TAAGAATTCG GCCTTCATGG CCTAATCGAG GAGAATGGAG ACCAAACCTG 60
TGATAACCTG TCTCAAAACC CTCCTCATCA TCTACTCCTT CGTCTTCTGG ATCACTGGGG 120
TGATCCTGCT GGCTGTTGGA GTCTGGGGCA AACTTACTCT GGGCACCTAT ATCTCCCTTA 180
TTGCCGAGAA CTCCACAAAT GCTCCCTATG TGCTCATCGG AACTGGCACC ACTATTGTTG 240

```

TCTTTGGCCT	GTTTGGATGC	TTTGCTACAT	GTCGTGGTAG	CCCATGGATG	CTGAAACTGT	300
ATGCCATGTT	TCTGTCCCTG	GTGTTCCCTG	CTGAGCTCGT	AGCTGGCATT	TCAGGGTTTG	360
TGTTTCGTCA	TGAGATCAAG	GACACCTTCC	TGAGGACTTA	CACGGACGCT	ATGCAGACTT	420
ACAATGGCAA	TGATGAGAGA	ATGCTCGAG				449

(2) INFORMATION FOR SEQ ID NO:548:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

GGGCTTTAAA	GGCAGACATT	GATGCTACAT	TATATGAACA	AGTCATCCTG	GAAAAAGAAA	60
TGGGAACCTTA	TTTGGGCACC	TTTGATGATT	ACTTGGAGTT	ATTCTGTCAG	TTTGGTTATG	120
TGAGCCTTTT	CTCCTGTGTT	TACCCATTAG	CAGCTGCCTT	TGCTGTGTTA	AATAACTTCA	180
CTGAAGTAAA	TTCAGATGCC	TTAAAAATGT	GCAGGGTCTT	CAAACGTCCA	TTCTCAGAAC	240
CTTCAGCCAA	TATTGGTGTG	TGGCAGTTGG	CTTTTGAAAC	GATGAGTGTT	ATATCTGTGG	300
TCACTAACTG	TGCCTGATT	GGAATGTCAC	CACAAGTGAA	TGCAGTCTTT	CCAGAATCAA	360
AGGCAGACCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:549:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

GTACAATCTG	AATCCAGGTC	TGACAGCTGG	CCATACAAAG	TCATACTTTC	CCCACATCCC	60
TCCTCTTTGA	TAGGCATTGT	CATCTAGAGC	AATAGCCTCG	AAATAGACTG	AACACCGTGG	120
CCCATAGCTT	AATCCCGTTC	CACCTCTATT	TCAAAGTAAA	CTTGGGCTGG	GATTACAGGC	180
ATGAGTATGT	TTTCATTTGT	ACATAAAGAC	TTTATACAAA	TGCTCTTCCT	AATATTTGCT	240
ACTTATTTTT	GCATTAGTTC	AAATCTTTTG	TCCTGTCATC	CCAAAACCTCT	CGAG	294

(2) INFORMATION FOR SEQ ID NO:550:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

GAATTCGGCC	TTCATGGCCT	ACACTGCACG	GGGAACCCCC	GAACCATCAT	CGTGCCACCC	60
CTGAAAACCC	AGGCCAGCGA	AGTATTGGTG	GAGTGTGATA	GCCTGGTGCC	AGTCAACACC	120
AGTCACCACT	CGTCTCCTA	CAAGTCCAAG	TCCTCCAGCA	ACGTGACCTC	CACCAGCGGT	180
CACTCTTCAG	GGAGCTCATC	TGGAGCCATC	ACCTACCGGC	AGCAGCGGCC	GGGCCCCCAC	240

TTCCAGCAGC AGCAGCCACT CAATCTCAGC CAGGCTCAGC AGCACATCAC CACGGCCGTC 300
GAG 303

(2) INFORMATION FOR SEQ ID NO:551:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

GCCACAAGCC TGTCAGCAAG TGGGGCTACT TGGGTCCTCG GGCCTCAATC CACTCCTGGC 60
CAGAGACAAC TTCCTCTCCC ATGGGAAAGG CTAACGCATG CCCATAAATT AAGACATTG 120
CTCTCCCTCC AAGCCCTGGA AACCTGGGAC TCTCTAACAT CTACCTCTGT TTTCTTTGGC 180
TGCATTCAAC TTTCCTGCAA TTAGTCAGGC CCTGGGGCAG CAGTTAGACG ACAGATGAGT 240
CAGAGGATTG CAGAATCTAA TCCAGAAGGA AGAGTTTATC CAAATGTTGG TGGCCTTTCT 300
CTTTTGGCGC ATTCTCTTCT GGTCTGTCT TTTCTCAGGA GTCCTCTGAG CTTCCATGTA 360
CCGGCCCCC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:552:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

GCAAGGGCAG GCGGGTCCCC CAGTCCCGCC ATTACGGGTT GTCAGACCGT CTGCGTGTGG 60
CAGGGGCTCC AAGGGCAGGC GGGTCCCCCA GTCCCGCCAT TACGGGTTGT CAGACCGTCT 120
GCGTGTGGCA TTTTGTGGCT TATAAGCTTC ACCCACTCAC CCCCAACCCA CACCCACAT 180
CCCCCTGCCG GCAGCCCTC AACCTAAGAA GGCCAGAGCA TATTATTTT CGGAGGGAGC 240
AGATTACTTC TCCCAGAGAA AGGAAAATCT TGGAAAAGAT TTAAAAACAC AAATCTAAGC 300
CTTGACGGTT TTTTGTCCC TTTTGACCCC CTTCCCATTT TTTCAGNATT TATTCCCATG 360
GCTTTTTTTT TTCTTGTCG TGTCTCGAG 390

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

GAATTCGGCC AAAGAGGCCT AAGCAGGCGC GAGGCGGCGG CAGCGAGCCG GGTCCACCA 60
TGGCCGCGAA TTATTCCAGT ACCAGTACCC GGAGAGAACA TGTCAAAGTT AAAACCAGCT 120
CCCAGCCAGG CTTCTTGAA CGGCTGAGCG AGACCTCGGG TGGGATGTT GTGGGGCTCA 180
TGGCCTTCCT GCTCTCCTTC TACCTAATTT TCACCAATGA GGGCCGCGCA TTGAAGACGG 240

CAACCTCATT GGCTGAGGGG CTCTCGCTTG TGGTGTCTCC CGACAGCATC CACAGTGTGG	300
CTCCGAGAGAA TGAAGGAAGC TGGTGCACAT CATTGGCGCC TTACGGACAT CCAAGCTTTT	360
GTCTGATCCA AACTATGGGG TCCATCTTCC GGCTGTGAAA CTGCGGAGGC ACGTGGAGAT	420
GTACCAATGG GTAGAACTG AGGAGTCCAG GGAGTACACC GAGGATGGGC AGGTGAAGAA	480
GGAGACGAGG TATTCCTACA ACACTGAATG GAGGTCAGAA ATCATCAACA GCAAAAACTT	540
CGACCGAGAG ATTGGACACA AAAACCCCAG TGCCATGGCA GTGGAGTCAT TCATGGCAAC	600
AGCCCCCTTT GTTCCTCGAG	620

(2) INFORMATION FOR SEQ ID NO:554:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

GAATTCGGCC AAAGAGGCCT AGGACTTGTT TCGGAAGGAG CTGACTGGCC AATCACAATT	60
GCGAAGATGA AGGCTCTGTG GGCCGTGCTG TTGGTCACAT TGCTGACAGG ATGCCTAGCC	120
GAGGGAGAGC CGGAGGTGAC AGATCAGCTC GAGTGGCAA GCAACCAACC CTGGGAGCAG	180
GCCCTGAACC GCTTCTGGGA TTACCTGCGC TGGGTGCAGA CGCTGTCTGA CCAGGTCCAG	240
GAAGAGCTGC AGAGCTCCCA AGTCACACAA GAACTGACGG CACTGATGGA GGACACTATG	300
ACGGAAGTAA AGGCTTACAA AAAGGAGCTG GAGGAACAGC TGGGTCCAGT GCGGAGGAG	360
ACACGGGCCA GGCTGGGCAA AGAGGTGCAG GCGGCACAGG CCCGACTCGG AGCCGACATG	420
GAGGATCTAC GCAACCGACT CGGGCAGTAC CGCAACGAGG TGCACACCAT GCTGGGCCAG	480
AGCACAGAGG AGATACGGGC GCGGCTCTCC ACACACCTGC GCAAGATGCG CAAGCGCTTG	540
ATGCGGGATG CCGAGGATCT GCAGAAGCGC CTAGCTGTGT ACAAGGCAGG GGCAGTCGAG	600

(2) INFORMATION FOR SEQ ID NO:555:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

GAATTCGGCC TTCATGGCCT AGTATTTCCT TATCACAGAT TTTGGGAGCA ACAGTGTTTT	60
CCCATCTGGA GGAGGCTGAG TTAATTCTGT GGAACACCCA TTTGGTTGGA AATAAAAACA	120
CAGCATGGAT TTAATTCATG CCACCTATTT ATTTTATTA GGAATTGAGC TTCTTTGTAT	180
TTTTTTTGCT TTGCTTCCAC TCAAAACCAG ATTGGTGGT TGCTGTGTAA ACAGTGAAAT	240
ACAACACAGG CCAGGACTCG AG	262

(2) INFORMATION FOR SEQ ID NO:556:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC AAGAGGCCTA GTATTCTTTC GTTCTCTCT AAAAGAAGAA AAATATAATT      60
TAGAAATACA TTGCGTATTT TCTAAAACAA TAAATTTTATA GTGTTAATAT TCATAGGGTC      120
AATCAAAATG AAGCTTCTCC TTTGGGCCTG CATTGTATGT GTTGCTTTTG CAAGGAAGAG      180
ACGGTTCCCC TTCATTGGTG AGGATGACAA TGACGATGGT CACCCACTTC ATCCATCTCT      240
GAATATTCTT TATGGCATAA GGAATTTACC ACCTCCTCTT TATTATCGCC CAGTGAATAC      300
AGTCCCCAGT TACCCTGGGA ATACTTACAC TGACACAGGG TTACCTTCGT ATCCCTGGAT      360
TCTAACTTCT CCTGGATTCC CCTATGTCTA TCACATCCGT GGTTTTCCCT TAGCTACTCA      420
GTTGAATGTT CTCCTCTCC CTCCTAGGGG TTTCCCGTTT GTCCCTCGAG      470

```

(2) INFORMATION FOR SEQ ID NO:557:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

```

GAATTCGGCC AAAGAGGCCT ATGCAGATTC TGTGGTTATA CTCACTCCTC ATCCCAAAGA      60
ATGAAATTTA CCACTCTCCT CTTCTTGGCA GCTGTAGCAG GGGCCCTGGT CTATGCTGAA      120
GATGCCTCCT CTGACTCGAC GGGTGCTGAT CCTGCCCAGG AAGCTGGGAC CTCTAAGCCT      180
AATGAAGAGA TCTCAGGTCC AGCAGAACCA GCTTCACCCC CAGAGACAAC CACAACAGCC      240
CAGGAGAGTT CGGCGGCAGC AGTTCAGGGG ACAGCCAAGG TCACGTCAAG CAGGCAGGAA      300
CTAAACCCCC TGAAATCCAT AGTGGAGAAA AGTATCTTAC TAACAGAACA AGCCCTTGCA      360
AAAGCAGGAA AAGGAATGCA CGGAGGCGTG CCAGGTGGAA AACAAATTCAT CGAAAATGGA      420
AGTTCCCTCG AG                                     432

```

(2) INFORMATION FOR SEQ ID NO:558:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

```

GAATTCGGCC AAAGAGGCCT AAAAAGTATA TACATTTTAG TACTGCTTTG ATTTTGTTTA      60
CATACTGAAA AATGTATCTG AAAATGAGTT ATTTTGGACT CGAG                          104

```

(2) INFORMATION FOR SEQ ID NO:559:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

```

GAATTCGGCC AAAGAGGCCT ATTCACTTCA GCTTCACTGA CTTCTGGATT CTCCTCTTGA      60

```

GTAAAAGGAC TCAGCCAACAT ATGAAGTTT TGTGTTTTGC TTTAATCTTG GCTCTCATGC	120
TTTCCATGAC TGGAGCTGAT TCACATGCAA AGAGACATCA TGGGTATAAA AGAAAATTCC	180
ATGAAAAGCA ACATGATCTC GAG	203

(2) INFORMATION FOR SEQ ID NO:560:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

GAATTCGGCC ACAGAGGCCT AGCCCAGTCT CGGGTATGTC TTTATCAGCA GCATGAAAAT	60
GGACTAATAC AGTTGCTATG ATTATTAGTT TTTTGCTACT GAGTTGTAGG AGTATCTGAT	120
ATATATTTTG GTAACATAATC CCTTATAAAA TATATTGTTT CCAAATATTT TTTTCCCAT	180
CCATAGGCTG CCTTTTCATT CTGTTGTTTC CTTTGCTTCA GGTAAGGGAT TCTGAAACAA	240
CTATTGGGCG AGCAGAACAG CTTCTTTTGT TTGCTTTCTC ATTGTCTACT GTGTTCTGCA	300
TAAATAAGGT TATGAATTAG CTGTTGTTCA TATGGGTGAA AGATTGTCAT CTGTGGACGC	360
TTAGATAGCA CATATGGTAA ACCATAGAAC TTCACCATT ATAACCTTTG AACAACTGAT	420
ACACTTAGAA AAGCAGTTTT TGGCTGGGCG CGGTGGCTCA TGCCTGTAAT CCCTAGGCCT	480
CGAG	484

(2) INFORMATION FOR SEQ ID NO:561:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCCT CGAGCTGACA ACTATGAAGT	60
TTTTTGTTTT TGCTTTAATC TTGGCTCTCA TGCTTTCCAT GACTGGAGCT GATTACATG	120
CAAAGAGACA TCATGGGTAT AAAAGAAAAT TCCATGAAA GCATCAAGGA CTCGAG	176

(2) INFORMATION FOR SEQ ID NO:562:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

GAATTCGGCC AAAGGGCCTA ATTTTATTAA TAACATTTTA AAAACAACAA TTATGAAAAA	60
GCAATTCGGT TTACCGCTGA TGCTTGCGTC AGCCCTCGCC TTCTCTGCTT GTAGCTCTGA	120
TGATGTGGCC GAGAATGGCC CAAAGGACAT CGCAGCTCTT ACAGATGGTG GTTACTTGAA	180
GATGTCTATC AATCTTCCTT CCCGTGCTGC TAATGGTGGC TTCAGAGCTA CGGAACAAGA	240
CGGTTATGTT AACTTGAAG ATGGATTGGC AAAAGAGTAC AATGTAAAGG ATGCTATCCT	300

```

CGTCCTTTTC CAAGGTGATA ATGAAGCAGA TGCCAAGTTC CATTCTGCAT ATGAACTTAC      360
TACATCAATG CAGAAGGATG GCTCTACGCA AATCACTTCC ACAACGAAAC TTGTTAAGAA      420
TGTGAATATT GGTGGTCAGG GAAATCCTCT TAAACCTGCT GATGTTAAGC TCGAG          475

```

(2) INFORMATION FOR SEQ ID NO:563:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

```

GAATTCGGCC AAAGAGGCCT ACAATTATGG GGCTTATGGG GAACATGCTC ATTGTGTTTT      60
ACCAATCAGG ACATGGAAC TAAACAATAT TTGTTGACTT ATAGTGAAAC CTGGCTAATT      120
AGGACTCTTA ACCAGCACTC TTAATTAAC TACTTATTTT TCTCTGTGTC CACCCCTCTT      180
AAAGAAAAAG AAGCGAAACT CGAG                                          204

```

(2) INFORMATION FOR SEQ ID NO:564:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

```

GAATTCGGCC AAAGAGGCCT ATAGGCCTCT TTGGCCGTAG GCCTCTTTGG CCGATTGAAT      60
TCTAGACGCG GCTCGAGGCA GGTCTAGGCC TCTTTGGCCG AA                      102

```

(2) INFORMATION FOR SEQ ID NO:565:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

```

GAATTCGGCC AAAGAGGCCT ACTCAATTGT TCCTTTCTTC CATCACCACC CTTTGAAGGT      60
CTCTTTGCCT ACTTGTAGAT TTAGGGGGAC ATAACATTGA GACTGAGCAG TTTCTTGAAC      120
CTCTCCTCTC AGCAGCCACC AGCCTGGCTT TCGCAGACCA CTGGAAAGTA TCCCAGCTCA      180
TTAGCTTTTG GAATGACGGG AAGCCTTTTG ATGTTNGACG TCTTAATCTC AACTCTTCAA      240
CTTAGCTCAT TCTGGAGCAG TCACGCGATG ACAGATGAGC TCGAG                      285

```

(2) INFORMATION FOR SEQ ID NO:566:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

GATAACTTGA	GATCAAATCA	GTCATATTTG	ACTCTTCTCT	TTTTCACCTC	TTTTATATCT	60
GATCAGTCAG	CAGTTTTTTG	AAACCCTGTT	CGAAGCAGTT	CTCAACACTT	GTGCACCCAT	120
TCTTTCTCCT	ACACCACTCA	ATCTAGACCC	TCACATGTGG	CTGTCCTGCT	TTCCTTCTCT	180
CCTACTTCTA	AGCTATTCTG	TGGAGAGATG	TCAAAGTAAT	CTTCACAAAA	AATCTGATTG	240
CATCACTTCA	CATCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:567:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 374 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

GGGCTTTAAA	GGCAGACATT	GATGCTACAT	TATATGAACA	AGTCATCCTG	GAAAAAGAAA	60
TGGGAACCTA	TTTGGGCACC	TTTGATGATT	ACTTGGAGTT	ATTCCTGCAG	TTTGGTTATG	120
TGAGCCTTTT	CTCCTGTGTT	TACCCATTAG	CAGCTGCCTT	TGCTGTGTTA	AATAACTTCA	180
CTGAAGTAAA	TTCAGATGCC	TTAAAAATGT	GCAGGGTCTT	CAAACGTCCA	TTCTCAGAAC	240
CTTCAGCCAA	TATTGGTGTG	TGGCAGTTGG	CTTTTGAAAC	GATGAGTGTT	ATATCTGTGG	300
TCTACTAAGT	TGCGCTGATT	GGAATGTCAC	CACAAGTGAA	TGCAGTCTTT	CCAGAATCAA	360
AGGCAGACCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:568:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GAATTCGGCC	TTCATGGCCT	AGATAAGTAA	ATAGACTTAC	AGAGGGAAA	TAAGTTGGCT	60
AAGGTGAACT	TGAACCAAGA	TGACTGACTC	CAGAGCTTCC	ATTTTTCTTT	TTCTTTCTTT	120
TTTTTTTTTT	NGGAGACAGA	GTCTCACTCT	GTCGCCCAGG	CTGGAGTGCA	ACGGCGCGGT	180
CTCCACTCAC	TGCAGCCTCC	AGCTCCTGGG	CTCAAGTGAT	CCTCCCACCT	CAGCACCCCC	240
ACGTCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:569:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 367 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

```
GAATTCGGCC TTCATGGCCT ACAGGGAGGG AGGGGTTCTG AGAGCCTCAG ACCACAGGGC      60
CTGAGGCCCA CAGTGGCCCA GAGTCCATCT GGCAGCCCCT GCTCTGCTGG CCCAGGGGGC      120
TCTCCCAGG GTGGAGTAGG CAGGGGAGGG TCGCTGGTCC CCAGTCCCAG CCTTCGAGAG      180
GTGGGGCCAG ACAGCAGGGC ACCCGTACCC GAGACCACAG TGCTCCCCAA GGCCAGCTCT      240
CTCCCCAGTG AGGTCACTCC TACCTCCGGG GCCATTTGGG GCGGGGGATC CTGTAGATCT      300
CTGACTCTGC GCGCCTTAT CTTGATGGCC TGGCNCAAGA AGGGAGGGCG CTGCCACTT      360
CCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:570:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

```
TTTTGACTGA CTCTTTAAAT TAGTACAATT TTTCTACTTG TCATATAACT CCTGGAACAA      60
TAGTACGGGA AGCCGTGATC CTTTCCCTG ACTCATGATT TTAGTCTTTT TCCAAATCGC      120
TGTTTTTTTT TGGTTTTTTT TTTTTTGTCT GCTCCAACGA CCAGCATGTG TTGGAGCAGA      180
TCTCCATGGT AAGCCAAAAG TGGACTTGTC AGCCTATAAC TACTCTGCAG CTGCCACTAA      240
CTCTACAGGC ACAGAGCTCG AG
```

(2) INFORMATION FOR SEQ ID NO:571:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

```
CAGAACTCT TGGACTCAAA AGAGAAAGAA AAAAGTCAAG CCAAGGAAAG CACAAGAGGT      60
AAGACAGGCC TAGTGATCTC AGCAGGCAGA ATTTATGGAC ATATTTTGCA GGCAAGTGGT      120
TCTCAATCAG GGGTGATTTT TGGCTTGTA GACATTTAG CAATATCTGG ACACATTTTT      180
TGGTTGTCGT AAGTGGATGG GGGTTGCTGC TATCATCCTA CAATGCATAG GTGCATTAGT      240
CTGTTTTTCAT GCTGCTGATA AAGACATACC GGAGACTGGG CAATTTGCAA ATGAGAGATG      300
GCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:572:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 578 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

GAATTCGGCC	TTCATGCCTA	CAGCCATATT	AAACTAAGT	AAACTCGTCC	CTGGGAACTA	60
CACTTTGAGC	TTGACTGTAG	TAGACTCTGA	TGGAGCTACC	AACTCTACTA	CTGCAAACCT	120
GACAGTGAAC	AAAGCTGTGG	ATTACCCCCC	TGTGGCCAAC	GCAGGCCCCA	ACCAAGTGAT	180
CACCCTGCCC	CAAACTCCA	TCACCCTCTT	TGGGAACCAG	AGCACTGATG	ATCATGGCAT	240
CACCAGCTAT	GAGTGGTCAC	TCAGCCCAAG	CAGCAAAGGG	AAAGTGGTGG	AGATGCAGGN	300
TGTTAGAACA	CCAACCTTAC	AGCTCTCTGC	GATGCAAGAA	GGAGACTACA	CTTACCAGCT	360
CACAGTGACT	GACACAATAG	GACAGCAGGC	CACTGCTCAA	GTGACTGTTA	TTGTGCAACC	420
TGAAAACAAT	AAGCCTCATC	AGGCAGATGC	AGGCCCAGAT	AAAGAGCTGA	CCCTTCCTGT	480
GGATAGCACA	ACCCTGGATG	GCAGCAAGAG	CTCAGATGAT	CAGAAAATTA	TCTCATATCT	540
CTGGGAAAAA	CACAGGGACC	TGATGGGTGC	AGCTCGAG			578

(2) INFORMATION FOR SEQ ID NO:573:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 623 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

GAATTCGGCC	TTCATGGCCT	AACCTTGTGT	GATCAGAGTT	TATGGGTTGG	GCTGCCCCAG	60
GCTTGATAAA	CTTAAAGGCT	TGATGAGGTC	ATCAATTTAT	GCTTGGCTAC	CCATGGCACA	120
GAAGCATAGC	CCCACTGTGA	TGGCTGGGGT	GGCTCCGGGC	ATCCTGGGCA	GTCAGGAGGA	180
AACTCCATGA	AGGAAGGAGC	TAACCTTTCT	GGGGGTACCC	CTATCCCAGC	ACAGACTTCC	240
TCATCTCATT	GGTCAGAACT	GGGTCACATG	AACATGCCTC	AGCCTATCAC	AGGCACAGGG	300
AATGAGACCA	TCATGGACCA	ATCAGGATTC	ACCACTCAAG	GTGGGGCCTG	CCATCCGGAT	360
GGATGCTCTC	CGCCACAGGG	AGGTGGGGGA	CCCAGAAGCT	GTGGGCAATG	GCCATGTGCA	420
CAGTAGGACT	GAGGCACTCA	GTCCCGTAGC	TGACCTACCT	GGGACAGGCC	TGGAGGCTGA	480
CTTAGGTGTG	AGGGGCAGAG	AGATTACTGT	GCACAGACCG	CTGTGTGACC	CCAGATCTAG	540
GTGGGATCCC	GGTGTGCCCC	ATCTGCCTGG	CTTACCCCAA	CCCCTCTGGA	ACCTGAACCA	600
TTGAATTCTA	GACCTGCCTC	GAG				623

(2) INFORMATION FOR SEQ ID NO:574:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

GAATTCGGCC	TTCATGGCCT	ACTCCAGAAT	GAAGATCTTC	TTGCCAGTGC	TGCTGGCTGC	60
CCTTCTGGGT	GTGGAGCGAG	CCAGCTCGCT	GATGTGCTTC	TCCTGCTTGA	ACCAGAAGAG	120
CAATCTGTAC	TGCCTGAAGC	CGACCATCTG	ATCCGACCAG	GACAACTACT	GCGTGACTGT	180
GTCTGCTAGT	GCCGGCATTG	GGAATCTCGT	GACATTTGGC	CACAGCCTGA	GCAAGACCTG	240
TTCCCCGGCC	TGCCCCATCC	CAGAAGGCCT	GCTCGAG			277

(2) INFORMATION FOR SEQ ID NO:575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

```
GAATTCGGCC TTCATGGCCT AAGCTTTTGC TTTTAAATA ACTTGATAG CTAAAAACTT    60
GACGGTGAAA AGCTCTCAGA TCAAAGCTGA TCCTTCTGTC AGTAATGATT CTAAAAATAA    120
GCAAGATTTT AATGGGGAAT ATATTTTATT TCATTCTTAT CTCAAACCTA GGTACTGTGG    180
TCGTTTTGAG TTCATTTTCA GGCATTTTCA ATGTGCCTCA GGCCACATCC AACCTCTCCC    240
CAGAACTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:576:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 261 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

```
GAATTCGGCC TTCATGGCCT ACAGTCTAAG ACATTTCTTA TTCTGCCTTC TTGTCTTCTT    60
CCCTCTCTTC CACATTGGTC AGACTTACAT CTTGGACAGC TCTCCAGCC ATCTTCTACT    120
GCCTCCCTAT TTTTCCCTCC CAGACTTTTC CCCGCAAAAC ATCTGTTGCA GGTGGTATTA    180
ATTCCTATC ACGGCTGTGA CAAATTACCA CAACTCAGT GGCTTAAAC AATGCACATT    240
TATTATCTGA CAGTTCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:577:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 216 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

```
GAATTCGGCT TCATGGCCTA GCAAGACTCC ATCTCAAAAA AAGAAAGAAA GAAAAAGAA    60
AGTACAAGTT TATAAAGTAT TATAGTGAAA AATTCGCATT CTGGCTGATT TTAAGCCATT    120
TAAATTTTAT ATAAACAAC CTTCCATAAA AATTGACAG GTGCCAGAT GTTGCTTTCT    180
CCATTTATTT TTTGTTTTTT TTTAATCACA CTCGAG                                     216
```

(2) INFORMATION FOR SEQ ID NO:578:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 294 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTAA	GTGCCGAAAA	CTTCACTGTG	CTCATCAAGA	60
ACAATATCGA	CTTCCCCGGC	CACAACTACA	CCACGAGAAA	CATCCTGCCA	GGTTTAAACA	120
TCACTTGTAC	CTTCCACAAG	ACTCAGAATC	CACAGTGTCC	CATTTTCCGA	CTAGGAGACA	180
TCTTCCGAGA	AACAGGCGAT	AATTTTTCAG	ATGTGGCAAT	TCAGGTTGGT	GGTGCTTTGT	240
ACACTGGGAT	GTGGGGCTGT	GTGTCTAGGG	ATGGAGGATG	TCAAACAAC	CGAG	294

(2) INFORMATION FOR SEQ ID NO:579:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

GAATTCGGCC	TTCATGGCCT	ACCTTCACAG	AAAAATGCAT	AGCTGGATGC	TGCAGACTCT	60
AGCGTTTGCT	GTAACATCTC	TCGTCTTTC	GTGTGCAGAA	ACCATCGATT	ATTATGGGGA	120
AATCTGTGAC	AATGCATGTC	CTTGTGAGGA	AAAGGACGGC	ATTTTAACTG	TGAGCTGTGA	180
AAACCGGGG	ATCATCAGTC	TCTCTGAAAT	TAGCCCCCCC	GATCTCGAG		229

(2) INFORMATION FOR SEQ ID NO:580:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTCGGCC	TTCATGGCCT	AGCTTACTTT	ACAATTCTGC	TGTTTGTCAA	GTGTTCTTAT	60
AGTTTTTTTT	AAAGGTATGT	TAATATTTT	TCCCTTTTGG	TTTATATTTG	TAGGAATCTT	120
TGCCTTTAAG	TGTGCCCGTG	CAGAAGAATT	ATTTAACATG	TTGCAAGAGA	TTATGCAAAA	180
TAATAGTATA	AATGTGGAGC	TCGAG				205

(2) INFORMATION FOR SEQ ID NO:581:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAAGTGTAAT	GTCAGACACA	CAAGAAAAGC	AAATCAGTGT	TGTAAGCTTA	AAGTACAATT	60
TCAAAGGTCA	TTACCAACAG	CAGGGTTTTT	TTTATACTTT	AAAAACATTA	TGCTACATAT	120
CATTGCCATT	TTTATATTTT	GGGGTTTTGC	TACTCTTATA	CAATGGAATC	AATGGAAATG	180
TCATCCAGCC	AGATCTCGAG					200

(2) INFORMATION FOR SEQ ID NO:582:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

```

GAATTCGGCC TTCATGGCCT ACACAAATGT TTGTTGAGTG CTCATTGTAT GTCTGGAGAC      60
CATTCTGTCT TCTTCCCTAA GAGTGTTCAT GCTGTTGGAC CAGGTGTTAT GATTTTGCTC      120
TGGAGAATAA GGTATTTCCA CATGGAGCAT GTGGAAAATA TAGTGCCTAT CTCCTGAAAG      180
GTCCAGGTGA TGCAAAGATG AATGAGACAT GATTGGAGGT TTTTCTTCTG TCTGAAATGC      240
AGACAGTTCT GGGTTGGGCA GCTCTGTAAG ATGCTGAACA TGTGTCCTTC CAAGAAGCAA      300
GGATCAGAAA GCAGACTCTA G

```

(2) INFORMATION FOR SEQ ID NO:583:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

```

GAATTCGGCC TTCATGGCCT ACACCATTGA CTTCTTCTAC CGGCCGCATA CCATCACCCT      60
GCTCAGCTTC ACCATCGTCA GCCTCATGTA CTTGCGCTTT ACCAGGGATG ACTCTGTTC      120
AGAAGACAAC ATCTGGAGAG GCATCCTCTC TGTTATTTTC TTCTTTCTTA TCATCAGTGT      180
GTTAGCTTTC CCCAATGGTC CGTTCACTCG ACCTCATCCA GCCTTATGGC GAATGGTTT      240
TGGACTCAGT GTGCTCTACT TCCTGTTCTT GGTATTCCTA CTCTTCCTGA ATTTTCGAGCA      300
GGTTAAATCT CTAATGTATT GGCTAGATCC AAATCTTCGA TACGGCCACC TCGAG      355

```

(2) INFORMATION FOR SEQ ID NO:584:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 374 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

```

GGAAACTTCT AGAAATAATG ACAAGGATTC AAATTATTG TCAAATGAGT CCAATGTCAG      60
ATTTTGGAAC TCAACCCTAT GAACAATGGG CCATTCAAAT GGAAAAAAAA GCTGCAAAAG      120
AAGGAAATCG CAAAGAACGT GTTGTGTCAG AACATTGAG GAAGTACAAT GAGGCCCTAC      180
AAATTAATGA CACAATTCGA ATGATAGATG CGTATACTCA TCTTGAACT TTCTATAATG      240
AAGAGAAAAG TAAGAAGTTT GCAGTCATAG AAGATGATAG TGATGAGGCT GGTGATGATG      300
AGTATTGTGA TGGTGATGAA GATGAGGATG ATTTAAAGAA ACCTTTGAAA CTGGATGAAA      360
CAGATAGACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:585:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 295 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

```
GAATTCGGCC TTCATGGCCT AGAGAACTG AGAGGAAGTT AAAGATTGT CTTACAAAGG      60
CTGTGTAGTG ATAAGACCTA AGGTTTTCTC TGAGATTCAA AATGGGTATT ATTTGTTCTT    120
TAATCCTTCT GATTATTCTT TTGGAAGGAA GGAAGTAGA GGAAAGGAAG TAGAAAAATA    180
ATATTTCTTA TACTATTAT GTACCAGACA TGGTGCTAAG TTCATTTAAA ACGTGCCTC      240
ATTTAATCTT TGCAACCAAT TTATACCCAT ACACATAAGG CCACAAAAGC TCGAG          295
```

(2) INFORMATION FOR SEQ ID NO:586:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

```
GAATTCGGCC TTCATGCCTA AGGTAAGGGA AAGTGAGAAG CAGCAGGATA GTCAGCCTGA      60
AGAAGTTATG GATGTGCTAG AGATGGTTGA GAATGTCAA CATGTAATTG CTGACCAGGA    120
GGTAATGGAA ACTAATCGAG TTGAAAGTGT AGAACCTTCA GAAATGAAG CTAGCAAAGA    180
ATTGGAACCA GAAATGGAAT TTGAAATTGA GCCAGATAAA GAATGTAAAT CCCTTTCTCC    240
TGGGAAAGAG AATGTCAGTG CTTTAGACAT GGAAAGGAG TCTGAGGAAA AAGAAGAAAA    300
AGAATCTGAG CCCCAACCAC TCGAG          325
```

(2) INFORMATION FOR SEQ ID NO:587:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 272 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

```
GAATTCGGCC TTCATGGCCT ACAAGGACGT TAAAGGCATT TTATTCCAGC GTCTTCTAGA      60
GAGCTTAGTG TATACAGATG AGGGTGTCG CTGCTGCTTT CCTTCGGAAT CCAGTGCTTC    120
CACAGAGATT AGCCTGTAGC TTATATTTGA CATTCTTCAC TGTCTGTTGT ATACCTACCG    180
TAGCTTTTTA CCGTTCACCT CCCCTTCCAA CTATGTCCAG ATGTGCAGGC TCCTCCTCTC    240
TGGACTTTCT CCAAAGGCAC TGGACCCTCG AG          272
```

(2) INFORMATION FOR SEQ ID NO:588:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 243 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

```
GAATTCGGCC TTCATGGCCT AGCATCCCTG AAACGTGTGTA ATTTTGAGGA TCCTTCTGGT    60
CTTAAAGCCA ATTTAGAAGG TGCTAATCTG AAAGGTGTGG ATATGGAAGG AAGTCAGATG    120
ACAGGAATTA ACCTGAGAGT GGCTACCTTA AAAAATGCAA AGTTGAAGAA CTGTAACCTC    180
AGAGGAGCAA CTCTGGCAGG AACTGATTGA GAGAATTGTG ATCTGTCTGG GTGTTAGCTC    240
GAG                                                                    243
```

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

```
GAATTCGGCC TTCATGGCCT AAATTATACT CCAAATGTTT TATCTAAAAT GCATTTTCTG    60
TCTTTTCCTT TTTACTCTTG TCCTCACTTT TAATGATCCA TCGGCTGACA GTGTCTTTAC    120
ATCCAAAATG CAAAGCAGAC AAATGGGCAT ATCAGGGAAG AACATGACAA AAAGCACCAG    180
CATCAGTGGA GACATGTGCT CACTGGAGAA GAATGATGGC AGCCAGTCTG ACACTGCAGT    240
GGGCACCTTG GGCACCACTG GCAAAAAGCG GCGCTCTAGC CTTGGTGCCA AAATGGTAGC    300
TATCGTTGGT CTGTCACGGA AAAGTCGCAG TGCTTCTCAG CTCAGCGGAC TCGAG        355
```

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

```
GAATTCAAAT GCTTCAGGTA AATGTTGAAG CTCGGTGTA CCGGGGACAA ATCCTGAGTC    60
ACCCCTGGGT GTCAGATGAT GCCTCCCAGG AGAATAACAT GCAAGCTGAG GTGACAGGTA    120
AACTAAAACA GCACTTTAAT AATGCGCTCC CCAAACAGAA CAGCACTACC ACCGGGGTCT    180
CCGTCATCAT GAACACGGCT CTAGATAAGG AGGGGCAGAT TTTCTGCAGC AAGCACTGTC    240
AAGACAGCGG CAGGCCTGGG ATGGAGCCCA TCTCTCCAGT TCCTCCCTCA GTGGAGGAGA    300
TCCCTGTGCC TGGGGAAGCA GTCCCGGCC CCACCCCTCC GGAATCTCCC ACCCGCTCG    360
AG                                                                    362
```

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

GAATTCGGCC	TTCATGGCCT	ACTCAGTCTG	CACAACCTTT	TGCTGTGTG	TCGGAATATG	60
TATAACTGGC	TACTGCAGAA	TCCCAAAAAT	GTCTGTGTTG	TCCACTGCTT	GGATGGACGG	120
GCGGCATCAT	CAATTCTGGT	TGGTGCTATG	TTCATTTTCT	GTAATCTCTA	CTCTACTCCT	180
GGCCCAGCCA	TTCGATTGCT	ATATGCAAAG	CGACCAGGAA	TTGGACTTTC	ACCATCCCAT	240
AGGAGATACC	TGGGCTATAT	GTGTGACCTA	CTGGCAGACA	AGCCCTACCG	CCCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

GAATTCGGCC	TTCATGGCCT	ACCGTAAGCA	GATGAAGCTG	CTGCTGCTGC	TGCTGCTGCT	60
GAGCTGCGCC	GCGTGGCTCA	CCTACGTGCA	CCTGGGCCTG	GTGCGCCAGG	GACGCGCGCT	120
GCGCCAGCGC	CTGGGCTACG	GGCGAGATGG	TGAGAAGCTG	ACCAAGTGAGA	CCGACGGCCG	180
GGGGGTCCAC	GCTGCGCCAT	CCACACAGAG	GGCTGAGGAC	TCCAGTGAGA	GCCGTGAAGA	240
GGAGACCAGC	GCAGACATGC	TGCGGCCAGA	TCCAGGGAT	TACCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

GAGAGATGGT	GACTGAGGCA	GAAGCTAATA	GGGAAGATGA	TAGGAAAGAA	ATTTTACCCA	60
AGGAATTAGA	TTAGCAAGA	GAGCGAAGGA	AAGCTGAGAG	GCCAAAAACA	TCTCTGAGGA	120
AAACTGACTC	TGAGAGAGAA	GAGGTGACAA	GGGCAATGC	ACTCAAGGAT	GAAGATGCTT	180
TTAAAGAAGA	GCAAAACTT	AAAGCGGAAG	AAGGGGAAAC	AGAGACAGAA	GTAAGAGCTG	240
AGGAAGAGAC	AAAAGCTCCC	CCAAATGAAA	TGGGATCTGA	TGCTGAGAAC	GAAACACTCG	300
AG						302

(2) INFORMATION FOR SEQ ID NO:594:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:


```

GAATTCGGCC TTCATGGCCT AGGATATTTA AACCTCTATT ATTTTAGACA AGACTGTCTA      60
GAACTTAAGT TTGATCTGTC AGCCAGTACT CCCATTAAAT TCAGTGTAGT TTCACTTGAT      120
AGAATCAGAT ATGTTATCGA AATGTTAGCA GCAGCTTCAT CCTCCTTCTG ATTAAAGTAA      180
GTAGAAATGG GATGTTTTGT TTAATAACAG CCATAGTGTG TGTTTAGACC ACAGCGGATG      240
TTGTAGACCA GGACCCTCGA G                                     261

```

(2) INFORMATION FOR SEQ ID NO:595:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

```

GAATTCGGCC TTCATGGCCT AGGGGCTTTT GTCAAGATAG AAGGGTATCA ACGGTTTCTG      60
TACAGCACAG ATTATGACAG CGTCTTTCTT AAGACTTATC ATTTGGAGCA CTGGCTCAGG      120
AGTCGAAATC ACCAATGGCT CATCCATCAA TCAACCAGAA GTGAAGACGA AAGCTTCAAA      180
GAAGAGAATG TTTAAATTTC ATCAAATGAA ACATATTTTT GAAATACTTG ATAAATGAG      240
ATGCCTGAGA AAACGTTCTA CAGTGTCAAT CTTGGGAGTT CTTGTCATTT TTCTCCTTTT      300
TATGAAGTTG TACATTGAAG ATAGCTATGT TCTGGAAGGA GACAAACAAC TTATAAGGGA      360
AACTCTCGAG                                     370

```

(2) INFORMATION FOR SEQ ID NO:596:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

```

GAATTCGGCC TTCATGGCCT ACTAACGACT CATCTTTGTT TTTAGTTTTT TTAATTAACA      60
ATCGTTCTGT TCACAATTTT TAATTTCCCTT TCTTCCCCCT TCTCCGCAAA GCACTCAGGC      120
ATCGGACACG CTATGGTAAA CAAACTACAT TGTCTGGTAG ATATCATTCT TATTGTCTCT      180
TTTTTTGGGT TTGCCGTGTG TTGCCCCCCT TTTCTCTCC AACCCCCCCC ATTCCTCGAG      240

```

(2) INFORMATION FOR SEQ ID NO:597:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

```

GAATTCGGCT TCATGGCCTA GTGTATTGGT TGTGTGTGTT TTCCTTTTTG CATAAGAAAT      60
ATGTCCATT AGTCCAGAGG CTCTTGCTTT ATCCGGATGA CGGAGGGTAC ACGGGGCGTC      120
CGCCTCAGTT CCCGCCGAAG GACGTATTCG CTGAACTGGG ACGAGTCTAC TCCTCCCCCA      180
CAGGAGCCCA CGATTTCAAA TCCTCTTTGC TGCAACCTCT CGAG                                     224

```

(2) INFORMATION FOR SEQ ID NO:598:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

```

GAATTCGGCC TTCATGGCCT AGATATTTTA AAGGAGTGAT GACATCTTTT TCCTATCATG      60
TGAAGAGGGG AAAGAGAAAG GAAAGGGCCC ATATTATTGT GTTCTGTCTT GTGCCAGCTG      120
TTCTATATCT GTTGATCTCA TTTAGTCCTC ATGACAGTTC TATGAGGAGG GCACTGTCAT      180
CATCACCATT GCACAGATGC AGAAACTGTG GCTCACAGAG GATAAAGCTA GGTCACCTAC      240
ACAACCCCTT GACTCCAGAG CCACCACTCG AG                                     272

```

(2) INFORMATION FOR SEQ ID NO:599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

```

GAATTCGGCC TTCATGGCCT AGTAAGGGAG AAACTGAATG GTGATTCAGA GCATAGAGAT      60
TATGTTTTTT TATGCACAGG GCTTCATCAG AAAAAATGGAA GGAATTGTCA ATAACAATAA      120
AATGTTTCAGC TAGATCAACT CAGTATATAG TATGTATTAT ACAATTATTC AAAATAGTGT      180
TTAACAGTAC TGAATAACA TGAATAAATG TTTTGTGATA TTAAGTGAAA AAGAGCTATA      240
TAAAATTATC TAAGTTTATG GTATATGTAG ATTGTTGCAA AAATGTCTTC AATTCCTTAT      300
CCCTCCCTGT ATCCACACCT GTATCAGTTT TCTCGGGGCA GCTGCCTCGA G                                     351

```

(2) INFORMATION FOR SEQ ID NO:600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

```

GAATTCGGCC TTCATGGCCT AGAATATTTT TATCATCCCA AAGCTAAAAC ATTAAAAAAT      60
TTAAAGTTTA TTCTTAGAGA TTGATGCAAC TTGCATATCT AATCGAG                                     107

```

(2) INFORMATION FOR SEQ ID NO:601:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

```

GGAAAATTAC TTAAACGTTG CACACAACGT TTCACAAAAT CTTTGTGAA AGAAGAAAAG      60
GAAATTCAGT GTGTGAGTCT CAGCAGGAGT TAAGCTAATG CAGCTTAACA TCATGCCGAC      120
AAAGAAGCGC TTATCTGCGG GCAGAGTGCC CCTGATTCTC TTCCTGTGCC AGATGATTAG      180
TGCACTGGAA GTACCTCTTG ATCTGGTACA GCCTCCAACC ATCACCCCGC TAAATCCCCT      240
AGAAGTCCCA CTCCTAAACA CATCCGTATT ACTCGAG                                277

```

(2) INFORMATION FOR SEQ ID NO:602:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

```

GAATTCAAAT TAACATTTTA CCTTGAAATA GTTGGCTTCA GATTAATATC AACTTAGTTT      60
CAATAGCATA GGAAATTTGC TTCACTATAT TTCCATTTTC TCCCCGTCCT TTGTGCTATT      120
ATTACTATAC CAATTAGATC TCTACACAAT ATAGGCATAT CAACACATTT TGTAAATTATT      180
TCCTTATCCA GTTGTCTTTT AATATAGATC TGTGAAGAAA AGTATTACAC AAATAGATCT      240
ATTCTGTTTT TTATAATTAT TTAATTACCT TTGGTGGTGC TGTTTATTTT TCATGCATTT      300
GAGTTACTGT CTAGTATTCA TTCATTTCTC TCTGAATCAC TCCCCGGTAT TGCTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

```

GAATTCGGCC TTCATGGCCT AGCCATCTTA TTTGAACTAT ATTTTTCCTT CAAAGAAGCA      60
ATAGGTCTCA ACATAGTGTA GGTAGCATCA GGTGACAGAA AGCCAATTTT ATTTTCAAAT      120
TTAAGTTAAT TATCTTCGTG ATCCTATTTA TCCACAATTT CTTTCAGAAA AGACTGAAAA      180
AACACATTAT ATTCAGGAGA TATAATGAAA TTATTGGAAG GCATCACTCG AG                232

```

(2) INFORMATION FOR SEQ ID NO:604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

GAATTCGGCC	TTCATGGCCT	AAATATTTTC	CATCTTCCTC	TCCAGTAAAC	ATTCTTTTGT	60
CATCACAGTC	TGTCTCTGAC	ACCTTCGTTA	AAGAGGTCTT	AAAATGGAAA	TATGAAATGT	120
TTTTGAACTT	TGGTCAGTGT	GGGCCCCCTG	CAAGTCTTTG	TCAGTCCATC	TCAAGACCTG	180
TGCCTGTCAG	ATTTCACAAT	TATGGAGATT	ATTTTAATGT	TTTTTCCCT	TTGATGGTAT	240
TGAATACTTT	TGAAACAGTG	GCACAAGCGG	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:605:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

GAATTCGGCC	AAAGAGGCCT	AAAAATATAA	TTAAAAATA	CATTGCGTAT	TTTCTAAAAC	60
AATAAATTTA	TAGTGTTAAT	ATTCATAGGG	TCAATCAAAA	TGAAGCTTCT	CCTTTGGGCC	120
TGCATTGTAT	GTGTTGCTTT	TGCAAGGAAG	AGACGGTTCC	CCTTCATTGG	TGAGGATGAC	180
AATGACGATG	GTCACCCACT	TCATCCATCT	CTGAATATTC	CTTATGGCAT	ACGGAATTTA	240
CCACCTCCTC	TTTATTATCG	CCCAGTGAAT	ACAGTCCCCA	GTTACCCTGG	GAATACTTAC	300
ACTGACACAG	GGTTACCTTC	GTATCCCTGG	ATTCTAACTT	CTCCTGGATT	CCCCTATGTC	360
TATCACATCC	GTGGTTTTCC	CTTAGCTACT	CAGTTGAATG	TTCCTCCTCT	CCCTCCTAGG	420
GGTTTCCCGT	TTGTCCCTCC	TAATCTCGAG				450

(2) INFORMATION FOR SEQ ID NO:606:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

GAATTCGGCC	AAAGAGGCCT	ATCAGGTGAT	TTAATAATAA	TTTAAACTA	CTATAGAAAC	60
TGCAGAGCAA	AGGAAGTGGC	TTAATGATCC	TGAAGGGATT	TCTTCTGATG	GTAGCTTTTG	120
TATTATCAAG	TAAGATTCTA	TTTTCAGTTG	TGTGTAAGCA	AGTTTTTTTT	TAGTGTAGGA	180
GAAATACTTT	TCCATTGTTT	AACTGCAAAA	CAAGATGTTA	AGGTATGCTT	CAAAAATTTT	240
GTAAATTGTT	TATTTTAAAC	TTATCTGTTT	GTAAATTGTA	ACTGATTAAG	AATTGTGATA	300
GTTTCAGCTTG	AATGTCTCTT	AGAGGGTGGG	CTTTTGTTGA	TGAGGGAGGG	GAAACTTTTT	360
TTTTTTCTAT	AGACTTTTTT	CAGATAACAT	CTTCTGAGTC	ATAACCAGCC	TGGCAGTATG	420
ATGGCCTAGA	TGCAGAGAAA	ACAGCTCCTT	GGTGAATTGA	TAAGTAAAGG	CAGAAAAGAT	480
TATATGTCAT	ACCTCCATTG	GGGAATAAGC	ATAACCCTGA	GATTCTTACT	ACTGATGAGA	540
ACATTATCTG	CATATGCCAA	AAAAATTTTA	AGCAAATGAA	AGCTACCAAT	TTAAAGTTAC	600
GGAATCACCT	CGAG					614

(2) INFORMATION FOR SEQ ID NO:607:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

GCGAAGACCA	TCAAATGAAT	TGTCACAATA	CTCGAATAAT	GCAAGACACA	GAAAAGGATG	60
ATAACAATAA	TGACGAATAT	GACAATTACG	ATGAACTGGT	GGCCAAGTCA	TTGTTAAACC	120
TCGGCAAAAT	CGCTGAGGAT	GCAGCCTACC	GGGCCAGGAC	TGAGTCAGAA	ATGAACAGCA	180
ATACCTCCAA	TAGTCTGGAA	GACGATAGTG	ACAAAAACGA	AAACCTGGGT	CGGAAAAGTG	240
AGTTGAGTTT	AGACTTAGAC	AGTGATGTTG	TTAGAGAAAC	AGTGGGGCTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:608:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

GAATTCGGCC	TTCATGCTTA	CTCAGAAAGC	CACTGCCCCA	AACAAGCCAC	CTGCATTATC	60
AAACACAGAG	AAGAGGAATC	ATTCCGCCTT	TTGGGGACCA	GAGAGTCAAA	TCATTCTGT	120
GATGCCAGAT	AGTAGTTCCT	CAGGGAAGAA	CAGAAAAGAG	GAAAGTTATA	TATTTGAGTC	180
AAAGGGTGAT	GGAGGAGGAG	GGGAACACCC	AGCCCCAGAA	ACAGGTGCAG	TGCTACCCCT	240
GGCGCTGGGT	TTGGCTATCA	CTGCTCTGCT	GCTTCTCATG	GTTGCATGCC	GACTACGACT	300
GGTGATCCTC	GAG					313

(2) INFORMATION FOR SEQ ID NO:609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

GCCCATTCGG	GCCCCATCT	CACCCAAGAT	CCCCCAGAGT	CCAGGAGCTG	GACGGGGACA	60
CCCTCAGCCC	TCATAACAGA	TTCCAAGGAG	AGGGCACCCT	CTTGTCCTTA	TCTTTGCCCC	120
TTGTGTCTGT	CTCACACACA	TCTGCTCCTC	AGCACGTCGG	TGTGGGGAGG	GGATTGCTCC	180
TTAAACCCCA	GGTGGCTGAC	CCTCCCCACC	CAGTCCAGGA	CATTTTAGGA	AAAAAAAAT	240
GAAATGTGGG	GGGCTTCTCA	TCTCCCCAAG	ATCCTCTTCC	G TTCAGCCAG	ATGTTTCCTG	300
TATAAATGTT	TGGATCTGCC	TGTTTATTTT	GGTGGGTGGT	CTTTCCTCCC	TCCCCTACCA	360
CCCGTCCTCG	AG					372

(2) INFORMATION FOR SEQ ID NO:610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

GGAGCTAAAT TTAAGAAATG CAACTAGCCA GGTGCTAAGA AGCTCAGTTA CACGTTTCTC 60
 AAAAGTTGGC TGTTAGTTCC ATGACTCAGA GTGCACTCAA ATCATTTTAA TTACTCGAG 119

(2) INFORMATION FOR SEQ ID NO:611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

GAATTCGGCC TTCATGGCCT AGGTCCTGTT TGCCTATTG AGCTGCTATT AGTGTGAGAA 60
 GAAACTCAGA TGATAGTAGC AGAAACAGAA AGAGGAAGAG GCTACAAGAG ATGCTAGATG 120
 CTGAACTTAA GGCATTTGAT AACCAATGGA TATAGAAAGA AAAGGAAATG AAAGGACAAA 180
 AATGGCTCTA AGTTTTCAAA CTTGACTGAT GAGGAAAATA TTCACATCAA GAATGGACTG 240
 AAGAAATAAG GAGGAGATGC TGGGTTAGGG TGAAAGGAGA TGAGCCCAT TTTACATTGG 300
 AAAGCTCTAT GGAACAACGG AAGTAGTAGT AGCTTTTATAT TCCAGTATGC CAAATTCTCA 360
 GCTCCAAGAC TCCAGCACTG TGTGCTCTAC AGTATGTTT GTGATGTGCC TGAGTTTGG 420
 TTTCTTTATT TCAATTAGGG ACTCTTCATA CCAGGGTCAG GGGTTATGCT CGAG 474

(2) INFORMATION FOR SEQ ID NO:612:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

GAATTCGGCC TTCATGGCCT AGTTCCTGTG CTCTTGAAAG AACAAAGTTGA TGCTTGTAAG 60
 GCTGTTTTGA TTATTTTATG GCGCATGATA ATGGAGCTTA CAATGAATAA AAAGACATGG 120
 GAACAGATGT TGCAATACT ACTCAGGATA ACAGAAGCTG TCATGCAGAA GCCAAAGGAT 180
 AAACAAATAA AGGACTTGTT TGCCAGAGC TTGGCAGGGT TACTATTAG GACGTCATG 240
 GTAGCTTGGA TCCGAGCAAA CCTCTGTGTG TACATTTCTC GAG 283

(2) INFORMATION FOR SEQ ID NO:613:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

GAATTCGGCA CGAGGGGCCG CCGTTTTTTT TTTTTTTTTT TTTTCAGGTG CACATAAAGT 60
 TAGTTTATTA ATGACTATAT TTTGAAGCCA GCCATTTTGT CCAATATTTA AATAACAAGC 120
 TGTTTAATAT TAAAGCAGAA AGTACTGCCA CATTGTGACA GAAGTACAGC TTTATCCATA 180
 AACCCCTTAC ACAATTATAC ATTAAATGCT ATTTTATTT AAGCAAGGCA CCCCTACTTG 240
 TTCTAAAATA TGGGATGTAC TACACCATGT ATTACTCGAG 280

(2) INFORMATION FOR SEQ ID NO:614:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAACCA AGAATTCGGC ACGAGGGAAT      60
GAAATTAGCT AACAGCCTTC AGCTACAGAA ACTTTGGGAT CCAGACAGCA TTTGAGCTGA      120
CGCCACGCCC TTCTCAGGCA GCCCCACAG TGAAGGAGGA GGATCTAGAA GGGCCTGGCC      180
ATTTTTCCTC AATGTAGGGT CCCTCTGATG GGAATTCTTT GTCTGGAGAC CCGAGCTGAG      240
ACTTTGTCTC ATTGGCATCT CTGTCCCTGC TCAATGCTGC TTTCCATGCT CCCTTTTCTA      300
TCACAGACAT CATAGCCTGA AATCTTTCCA CACCCAATAC TGCTTCCTAT ACCCCTTAGC      360
CTTTCCTGAT CTCATTGAGG TTACCATTTT TCCTCCGTCG CTCGAG                      406

```

(2) INFORMATION FOR SEQ ID NO:615:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGCTTT      60
TTTAGGTAAT TCTTGTACT CCTGCTGTCT ACCTCTCCTC ACACCCAGC ACCCCCCAGT      120
TTTTCAAACC TTGGTATCTG TTGGGTGAAC AGTATAATCT TTTCATCTGC TTTTAGAATG      180
TGGGATATTT CCAGTACCTA CTTTTTTTTT TTTTTTTTGC TGAATCCAAA GATATATAAA      240
TAAATATAT ATATTTTATA AAGATCAGAA TGATATAAAG GAGATACATG TTTCTTCCTT      300
TAAAAAATAA ACGGAAGTTA CATGTGTAAT GTTCATATTA TGATGCGAAT TCTCTGGTTC      360
CTCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:616:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```

GAATTCGGCC TTCATGGCCT AGGATGTCTG AGGTCTTAAC CTGCCAGTC CTGAATTCCT      60
GGGACTTCAA CGACTCTCTC TCTGCCAAT GATGTGAGTC TTTAGGTAGA GTTATAGCGC      120
AAAGGGCTAC TATCAATGTT ATTAAGCATA AATTATGACT AGAGCCACAG AATGATTTC      180
TCATTAATCC AAAAAAAAAA AAAAAGCAA CCACTCTTT ACTTTATGAT GAGCACATAA      240
ACAGTTTTTT TTTCTTTTTA TTTATCTACT TTTACTTACT TAAATTTTAG AGATGGGGTC      300
TTGCTATGTT GCCCAGACTA GACTCAAACCT CCTGGGCTCA AGTGATCCTC TAGCCTCAGC      360
CTCCCAAGTA GCTGGGACTA CAGGAAGGAG CTACTGCACC TGACTCAATT TTTTTTTTTT      420

```

CTGAGATGGA GTCTCACTCT GTGACCCAGG CTTGTCTCGA G

461

(2) INFORMATION FOR SEQ ID NO:617:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 391 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

GAATTCGGCC TTCATGGCCT ACATCAATAA CAGCCAAACT GAGACACATA ATGTTTTCTA	60
CGTCCAAGAG GCTAAATGTG AGAATCCAGA ATTTGAGAGA AATGTGGAGA ATACATCTTG	120
TTTCATGGTC CCTGGTGTTT TCCCTGATAC TTTGAACACA GTCAGAATAA GAGTCAAAAC	180
AAATAAGTTA TGCTATGAGG ATGACAAACT CTGGAGTAAT TGGAGCCAAG AAATGAGTAT	240
AGGTAAGAAG CGCAATTCCA CACTCTACAT AACCATGTTA CTCATTGTTT CAGTCATCGT	300
CGCAGGTGCA ATCATAGTAC TCCTGCTTTA CCTAAAAAGG CTCAAGATTA TTATATTCCC	360
TCCAATTCCT GATCCTGGCA AGAATCTCGA G	391

(2) INFORMATION FOR SEQ ID NO:618:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCGGCC TTCATGGCCT ACGTGAAGAC AAGATGAAGT TCACAATTGT CTTTGCTGGA	60
CTTCTTGGAG TCTTTCTAGC TCCTGCCCTA GCTAACTATA ATATCAACGT CAATGATGAC	120
AACAACAATG CTGGAAGTGG GCAGCAGTCA GTGAGTGTC ACAAATGAACA CAATGTGGCC	180
AATGTTGACA ATAACAACGG ATGGGACTCC TGGAAATCCA TCTGGGATTA TGGAAATGGC	240
TTTGCTGCAA CCAGACTCTT TCAAAAGAAG ACATGCATTG TGCACAAAAT GAGCAAGGAA	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:619:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCAAGG CCACGCCGGA GCTGTACCTT GGAAGGAGGA GCCAAAAATT ATGCTGAGAG	60
TGATCACAGT GAAGACGAGG ACAATGACAA CAATAGCCCC ACCGCAGAGG AGTCCACGAA	120
GAAGAATAAG AAGAAACCAC CGAAAAAAA GTCTCGTTAT GAAANGACAG ATACCGGTGA	180
GATAACATCC TACATCACTG AAGATGATGT GGTCTACAGA CCAGGAGACT GTGTGTATAT	240
CGAGAGTCGG AGGCCAAACA CACCGTATTT CATCTGTAGC ATTCAAGACT TCAAAGTGGT	300
AAGCGTTTTT AATGTGCTGT TCACTCTGCT CTGTATTCTC TCTTTTCCCA GTTCCATTGG	360

CGCTCTCGAG

370

(2) INFORMATION FOR SEQ ID NO:620:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 183 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

GAATTCGGCC TTCATGGCCT AAAAACCTTA CAACTAAAGC AAATAGACTT TTCAAGAATT	60
TAAATAGGAT TCCTTCCCTT TAATCAATTA ATTATCCACT TTGTCATGGT GTCAACCTGT	120
AATTTTCATGG TTTTGTGTGT GTGTGTGTGT GTGACAGAAA TTTACAAACA ATGTGATCTC	180
GAG	183

(2) INFORMATION FOR SEQ ID NO:621:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

GAATTCGGCC TTCATGGCCT ACAACTAATT TGATCATATT AACAAAGAGT TGGTTTTTAA	60
ACCAAGCAGT ATAAATATAA ATACAGCCTT GGGTAGATCA TAGTCAAAC ATCCAAATGC	120
AACCTCAGCT TCAAAGATTG TAAAGTCTTT TCTTCCCTT TTTCTCCTT CTTTTTTTTT	180
TCCTCCAAAT ATTTATTAC TACCTACCAT GTGCCAGGCA CTGTGATGGG CTATGAGGAT	240
GCAGTGGGG ATAGGACAGA TGCCATCCCT GCCCTGAGGA GACTTGCAGT TTATTGGAAA	300
AGATGGACAT CGTAAATAT ACAATCATAC AAATAAAAAT TACATAAATA ATTCAGTACT	360
TCAACTTGTG GGAGGTACAG CAGTTTATAA TAATAACATC CCTCCCACCT TCTTGAGAGA	420
GTCATTGGTT GCCCCACTTC TCTTCATGAA TGAGAGGACA TGATTAAACC TATCATTTCA	480
GGTAGGAGTT TACTGTGGGA TGGATATCAA TCTTCTATTA ATATGTTTGT GCTCATGCTC	540
TCCATTTTGC AATGGACGTC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

GAATTCGGCC TTCATGGCCT AAAATGAAAG CTATGTCTTA GAACCAATGA AAAGTGCAAC	60
CAACAGATAC AAACCTCTCC CAGCGAAGAA GCTGAAAAGC GTCCGGGGAT CATGTGGATC	120
ACATCACAAC ACACCAAACC TCGCTGCAA GAATGTGTTT CCACCACCCT CTCAGACATG	180
GGCAAGAAGG CATAAAAGAG AGACCCTCAA GGCAACTAAG TATGTGGAGC TGGTGATCGT	240
GGCAGACAAC CGAGAGTTTC AGAGGCAAGG AAAAGATCTG GAAAAAGTCT CGAG	294

(2) INFORMATION FOR SEQ ID NO:623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

```

GAATTCGGCC TTCATGGCCT AGCTTCTGGT AATGGCGGAC TAGATGATTT AGAGCAACCC      60
ACCCATTGAA AAGAACTACA AAACGTCAGA TCTCTAAAAG GCTACAAAAT TAATACAATT      120
GTGAGGAATT GCTAGGTTAT ACTACAAGAG AACAGAAGCA TCCAGAGAGG TAAGCCTAGG      180
ACTTAAAACT ATATTTTTAT TGAAGGTATC TGTGGTTGAG TAATAAGCCT GTGCTAAACT      240
GCGTGGAAC TATGGCACAT TCAAGGCACT ATAGTAACAG AAGTCAGAGC CCAAGGCCCA      300
TCAAAAGGGG TGGAGTGTTT CCTGACAAAC CATCACCCAT AGTATGCTGG GAACCGCAAA      360
TGTTTATACC TTCAGGGTAA TTGTAATCAA AAAATATACT AGCCCTTACA AAGTCTTGTA      420
GCTTGGCTTT GCATCATCTG GGTGGACTAG TGAAGTGTA GTTCTGAACA AATATTATGG      480
AGGCAACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

```

GAATTCGGCC TTCATGGCCT ACTTCCCTGA GCTGGGGTTT CCCTGCTTGT CCAGTTGTGA      60
GCTGTCCCTCG GTGTTACCGA GGCTGTGCCT AGAGAGTGGA GATTTTGTAT GAAAGGTGTG      120
CTCGCTCTCT GCGTTCTATC TTCTCTCTCC TCCTTGTTCG TGCAAACAC AAGATAAAGG      180
TAGTGGTGTG TCTCGACCCC ATCAGCCTCT CACCCACTCC CAGACACACA CAAGTCCTCA      240
AAAGTTTCAG CTCCGTGTGT GAGATGTGCA GGTTTTTTCT AGGGGGTAGG GGGGAGCTAA      300
AATCGAATAT AACTTAAAAT GAAAGTATAC TTTTATAAAT TTTTCTTTT AAAACTTGTT      360
GAAATTATTT CAGATACATA TTTTAGTGTC AAGGCAGATT AGTTATTTAG CCACCAAAAA      420
AAAGTATTGT GTACAATTTG GGGCCTCAAA TTTGACTCTG CCTCAAAAAA AAGAAATATA      480
TCCTATGCAT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

```

GAATTCGGCC TTCATGGCCT ACAAATTGA TTATGACAAG ATTGTCTACT ATGAAGCAGG      60
GATTATTCTA TGCTGTGTCC TGGGGCTGCT GTTTATTATT CTGATGCCTC TGGTGGGGTA      120
TTTCTTTTGT ATGTGTCGTT GCTGTAACAA ATGTGGTGGA GAAATGCACC AGCGACAGAA      180

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GGAAAATCGG	CCCTTCCTGA	GGAAATGCTT	TGCAATCTCC	CTGTTGGTGA	TTGTATAAT	240
AATAAGCATT	GGCATCTTCT	ATGGTTTTGT	GGCAAATCAC	CAGCTAAGAA	CCCGGATCAA	300
AAGGAGTCGG	AAACTGGCAG	ATAGCAATTT	CAAGGACTTG	CGAACTCTCT	TGAATGAAAC	360
TCCAGAGCAA	ATCAAATATA	TATTGGCCCA	GTACAACACT	ACCAAGCTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GAATTCGGCC	TTCATGGCCT	AGTTAGGTGG	CTTTTAGTGT	ATTGACAAAG	TTGTGAACCC	60
ATTATCACAA	TCTAATTTTA	GAACATTTT	ATCAGCCTCC	TTGCCCCCTA	AAAAAACCCA	120
GTACTTTTTA	CCAATCCAGT	CATTTAAAAC	TTACTACATA	TTTAATAGAT	GGATAGATAG	180
ACAGGAGGAT	GGACAGACTG	AAGGAAGAAT	GGATGATTAT	GTATAAATAA	ATGAAAAAAC	240
AAAAACTATC	CCCAAATCAT	AAGGGTATAC	GCAATGCTTT	CCTGTGGCAA	AAGATTTCGGA	300
ACATGTACAG	CAGATTTTTT	TTCAAATGTT	CATAATTCTA	AATTCCCCAA	ATGGTCTACA	360
CAACTTCTCG	AG					372

(2) INFORMATION FOR SEQ ID NO:627:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 575 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCGGCC	TTCATGGCCT	AGGAGAAAGG	AAGGGAAGCA	TTACTGGGTT	ACTATGCACT	60
TGCGACTGAT	TTCTTGGCTT	TTTATCATTT	TGAACCTTAT	GGAATACATC	GGCAGCCAAA	120
ACGCCTCCCG	GGGAAGGCGC	CAGCGAAGAA	TGCATCCTAA	CGTTAGTCAA	GGCTGCCAAG	180
GAGGCTGTGC	AACATGCTCA	GATTACAATG	GATGTTTGTC	ATGTAAGCCC	AGACTATTTT	240
TTGCTCTGGA	AAGAATTGGC	ATGAAGCAGA	TTGGAGTATG	TCTCTCTTCA	TGTCCAAGTG	300
GATATTATGG	AACTCGATAT	CCAGATATAA	ATAAGTGTAC	AAAATGCAAA	GCTGACTGTG	360
ATACCTGTTT	CAACAAAAAT	TTCTGCACAA	AATGTAAAAG	TGGATTTTAC	TTACACCTTG	420
GAAAGTGCCT	TGACAAATTG	CCAGAAGGGT	TGGAAGCCAA	CAACCATACT	ATGGAGTGTG	480
TCAGTATTGT	GCACTGTGAG	GTCAGTGAAT	GGAATCCTTG	GAGTCCATGC	ACGAAGAAGG	540
GAAAAACATG	TGGCTTCAAA	AGAGGGGATC	TCGAG			575

(2) INFORMATION FOR SEQ ID NO:628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

GAATTCGGCC	TTCATGGCCT	AACAGGGTCT	TGCTCTGTCA	CCCGGGATGG	AGTGTAGTGG	60
CGCAATCACA	GCTCACTGCA	GACTCAGCCT	CCCAGGATCA	AGCAATTCTC	CCACCTCAGC	120
CTCCCAAGTA	GCTGGGACCA	CAGGTGCACA	CCATCATGCC	CAGCTAATTT	TTGTATTTTT	180
TTGTAAAGAC	AGGTTTCACT	GTGTTACCCA	GGCTGATCTC	GAATCCCGT	ACTCAAGCAA	240
CTCCCCACCT	CAGCCTCCCA	AAGTGCTGGG	ATTACAGACG	TGAGCCACAG	CGCCGGGCCC	300
CAAAATCTAT	TTTAAATGTA	AAGAAACCCA	AAAGTAACAG	TTTTGTAAAA	GAAAATTCAC	360
GTAAGTGTTC	GTAGTAAATT	CTAAACACTG	TGTATCTTTG	TGTCTAGTTA	AATCCTAGGC	420
TTACAGCTAA	AATCAATGA	GAAGGCAAGT	ACTCGAG			457

(2) INFORMATION FOR SEQ ID NO:629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

GAATTCGGCC	TTCATGGCCT	AGAAAGCTAT	CATTATTGA	GAGTTAATTG	TATATTAAGT	60
ACCATGCTAA	GTGCTTTGTA	TGTATTATTT	ATCTTTATAA	AAATCCTATG	AAATGAATAC	120
TGTTATTTTC	CCCCATTATA	CAGATGAAGA	TAGAGAAAGG	AAGAAAAGGG	AGGGAAAGAG	180
GAATACCAT	TCACTGAGCA	ATTTTACTGA	AATATTTTAT	GGAGCATTTG	TGGGTTTTGT	240
TTGTTTGCTT	GTTTTGTTTT	TTTGTGTTT	TTTTTTTTTG	AGACAGAGTC	TCACCTTGTG	300
CCCCAGGCTG	GATCTCGAG					319

(2) INFORMATION FOR SEQ ID NO:630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

ACGGTGAAAC	CCTGTCTGTA	CTAAAAATAC	AAAAAATTAG	CGGGGCATGG	TGGTGGGCAA	60
CTGTAGTCCC	AGCTACTCGG	GAGGCTGAGG	CAGGAGAATG	GCATGAACCC	AGGAGGCGGA	120
GCTTGCACTG	AGCCGAGATC	ACGTCACTAC	ACTCCAGCCT	GGGCGACAGA	GCGAGACTCC	180
GTCTCAAAAA	AAGAAAAAAC	CAAGACAAAA	CCAAAAATAA	CTTTGTCTGT	TAAGTACAAT	240
ATCTGTGTTT	CTCAGGGACA	GTTTCTATTG	ACCATGTTT	TTCTTGTGCA	TAGACTATCC	300
TTTCCTTTTT	TTGTACATCT	TGTAATTTTT	GTTTATTAA	AACTGGAATT	TTAAAAATAA	360
TGCAGTGTGG	CAACTCTACT	GCTTGATTG	GCTCAAAGGT	ATATTATTTA	TTTTTTAATA	420
TAACAAACCA	ATATTTGGGT	TCTCTATTCT	ATAGTTTTAG	CATTTTGAAT	GCAACAACCTG	480
TCTTATTCAC	CATTTAATTC	TCAGTACTAC	CGTTTCTAGT	ACACAATATG	CACTTAATGA	540
ATATGAGGGT	CCTCGAG					557

(2) INFORMATION FOR SEQ ID NO:631:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

```

GAATTCGGCC TTCATGGCCT AGACCGTGCC AGGTATTGAG AGCGACCCCTC ACATTCCTAC      60
AGTGCTCTGT GTGGCATCTT AATGAAACTT TATTCTCTCC CCTTAAATGA GAAAGAATAG      120
CTAGTTGTCA TCCTTTCTGA ACCGATTTTG TCTTTCAAAG GTAGTAGTGT ACCAGGCCTG      180
CTATTTTGCA AAACGGTCTC CACCAAAATC GAATTACCTG CCTCGCGGGG CAGGCGTGTT      240
GACCAGGTGG ACTCTAGAAG TAGGTGGTTT GCTTGGTTTC TTTTCTTTT AAGGTTTCCC      300
TTTCTTCTTC TTCTTTTCTG TGTTTTTTTT TTTTTTTTTT TTTTTC AAT ATAGAACTG      360
TCCCTAAGAG AGGAAACCTT TCTGGCCATG TTATTCCAGG AATCTTTTGT CCCCTAAGTT      420
TGACCTTGTT CTTTCGTTCA CCCTTTACTC TTGCATCTCG AG                          462

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(2) INFORMATION FOR SEQ ID NO:632:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

```

GAATTCGGCC TTCATGGCCT ACATAAAATC AGTTGACTAT TGTGCAACAT AGAATTATTG      60
TTTGTGTGAA ATTACCGCTG AAGGACCTTG CCTACATTCA AGGGTCTATT TTTATTTTTC      120
CAGGTATTCT TTCACATTAG TGACATTATA GTCTAGTACA ACTGCTTGAT AATTGGGAGA      180
AACTAACATT AATTTTAGAT AGTGATTGAT AAAATTGGC CTGCCAAATG CATTTTAAAA      240
ATAATTCTAG GATTTATCTA TGCTCATTTT TAGTATACCT CATGATATAT AAGACATCTT      300
TCTTTGTCA TATCAGTTCT TCAGATACTA AGACAGAGGT CCTCGAG                          347

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(2) INFORMATION FOR SEQ ID NO:633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

```

GAATTCGGCC TTCATGGCCT AGGTGGTGCA ATAATTATAA ATGTTGCCAG TCAATGCCAA      60
CCAGTGCTCTG ATTGGCTTCC TGTGCATGTC CAATTTCCCTC TGTGACACTG TGTTGGTGCC      120
AGAGCTTCTG AATCTTCTTG AATCGCTCTT TGCATAAATG TAAAGGATTT CCCCCTCTGA      180
GTCCCTGGTC GGTCTCCCA TAATCATCAA GGTAAGGAGG AGAATAAAAA CAGCCTTTGG      240
TTTTGCCAGC TAAAAATAGC ACCTGACATT CCCGTACTCT CAGGAAGATG CCCACTCCAG      300
AGCCACAGGA GTAGGTGTGA GCTGTGCAGG CTCCTACATC CTCCCCTTCC AGTTCAGTCT      360
GGCAGCAGTA ACTCTGGGAG CACAGCAGAG ATCCGCACAC AAGGCACAGA GTTGGGGCTC      420
TGCTCTTATC ACCACCTGAT TTCGGGCACC TCGAG                          455

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(2) INFORMATION FOR SEQ ID NO:634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

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GCATGAAGGC CGGCCTTCAT GGCCTACAGG CTATGTACTG TATGATTCCA AATATGACAT      60
TCTGGAAAAG GCAAAACCAG GGACACAGTG AAAAGATCAG GGGTTGAGAG GGGAAAAAAG      120
GAGGGATGAG TAATCAGAAC ATACAAGATT TTTTAAAGGC AGTGGAACCG CTCTGTATAA      180
TACCATAATA GTGGATACGT GTCATTATGC ATTCATCCAA ACTCCTAGAA TGTACAGCAC      240
AAATAGTGAA CTGTAATGTA AATGCAGTGT GTAGGTGTTT ATACAAAAAA ACAGATGGAA      300
AGATTTTGTA CATAGCTCTA TGTGAAAATG TATTATTTTA TTAAGAGCAA AAATATGCTT      360
ATTTCAAATT TCCACGTACG ACTTTTTCOA AAAGACACGA TCCACTGAAA TAACCTCCCA      420
AAAGAATTC TATAATCTAT AGCAGGTGTA CATGTTGTTA ATCAAGTGCT TAATGTTACT      480
CGAG                                         484

```

(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

```

GAATTCGGCC TTCATGGCCT ACCCCACCAG AGGACAGACG TTGAAAGATA CCACGTCCAG      60
TTCTTCAGCA GACTCAACTA TCATGGACAT TCAGGTCCCG ACACGAGCCC CAGATGCAGT      120
CTACACAGAA CTCCAGCCCA CCTCTCCAAC CCCAACCTGG CCTGCTGATG AAACACCACA      180
ACCCACAGACC CAGACCCAGC AACTGGAAGG AACGGATGGG CCTCTAGTGA CAGATCCAGA      240
GACACACAAG AGCACCAAAG CAGCTCATCC CACTGATGAC ACCACGACGC TCTCTGAGAG      300
ACCATCCCCA AGCACAGACG TCCAGACAGA CCCCAGACCC CTCAAGCCAT CTGGTTTTCA      360
TGAGGATGAC CCCTTCTTCT ATGATGAACA CACCCTCCGG AACGCGGGGC TGTTGGTCGC      420
AGCTGTGCTG TTCATCACAG GCATCATCAT CCTCACCAGT GGCAAGTGCA GGCAGCAGTC      480
TCTCGAG                                         487

```

(2) INFORMATION FOR SEQ ID NO:636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

```

GAATTCGGCC TTCATGGCCT AATTTTATTT AAATTTTAT ATTTATATAT TTTATTTAAA      60
ATTTTCATGA AATGGCCAAG CAGGGTTTAA TATAAAATGG AAACAGGGTT TATCTCAGAA      120
ATTTGGTGGC TAAATTCCTT GTATCCCGTC TTATCTAGGG ATGTTGTTTG TTTCAAGGTT      180
CTACCTTGAG AGGAGCCTGT CATTTTCTTT TTTGTGTGCT GCTTTGCCCTA GTTGACATCT      240
TGGCTTTATG TGCTCCTGTT GAATGCATTG GGAAATTTTC TTTCTTCTTT CTATGTCCTG      300
AAATAGCTTA TATAAGAGGG AAACCTCTCGA G                                         331

```

(2) INFORMATION FOR SEQ ID NO:637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 625 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

```
GAATTCGGCC TTCATGGCCT ACAAAAATAC TTTCAATTTGT TTTGCTATTA CTAGTTTCTC      60
ATTTTTTTATT GCACTTGCAA TCATTTTAGG AATATCCTCA AAATATGCTC CAGATGAAAA      120
TTGCCCAGAT CAAAATCCTC GTCTCAGGAA TTGGGATCCA GGACAAGATT CTGCAAAGCA      180
AGTTGTTATC AAGGAGGGGG ATATGCTCCG TCTGACCTCA GACGCCACCG TGCATTCTAT      240
AGTCATTTCAG GATGGAGGAC TGCTTGTATT TGGGGACAAT AAAGATGGAT CCAGAAATAT      300
TACTTTGAGG ACTCATTACA TCCTGATCCA GGATGGTGGG GCGCTTCATA TTGGAGCAGA      360
AAAATGCCGC TATAAATCCA AAGCGACAAT TACCTTGTAT GGCAAGTCAG ATGAAGGTGA      420
AAGTATGCCA ACATTTGGCA AAAAGTTTAT TGGTGTGGAA GCTGGCGGGA CACTGGAGTT      480
ACATGGGGCA CGGAAGGCAT CGTGGACGTT GTTGCAAGG ACCCTGAATT CCTCAGGCTT      540
GCCGTTTGGG TCCTATACCT TTGAAAAGGA CTTTCCCGG GGCCTCAATG TGAGGGTCAT      600
TGACCAAGAC ACGGACGCTC TCGAG                                         625
```

(2) INFORMATION FOR SEQ ID NO:638:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 506 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

```
GAATTCGGCC TTCATGGCCT AGAGAACTTT TTGAGGGCTT TTTTITTTCC CCTTTTAAGC      60
TATTTTGTAT GTAGACTTAA TTTTCTAAT TTTGCCACTT CTGGCAATCT GAAATCATT      120
AAAAGGACAC AATTCAAATT TATGTTAAAG GTCATAAATT TTGCCCAGGA CTCAATATTT      180
TCTCATTTTT CCAAAAATAA AATCTTATTT ATGCATTATA GCGACTTGGT TTTCACTTTA      240
TCTTGAATTA TAGCTTTTAA GAGGCAGAAA GAATCCTTTT TATAAGGACA GTCTCAAGTG      300
TACACACAGA TTAAATATTA CAAATATAGG TTGCAAATAA AACTTTCAAA ATGTGGGATT      360
ATAGGAAGCA AAAGAGAACC AACCAGCA TCAACAAATT TACCTTTTGG TTTTITTTAA      420
AGATTTTTCT TATTTCTTA GCTGCTTTTG CATTAGCATT AAATAACATT CTTATTGGAG      480
TGGTATGTGC ATGGCCCAAG CTCGAG                                         506
```

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 388 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

```
GAATTCGGCC TTCATGGCCT ACTCCAGCTT TATTATCTCA GCTACCATCA AACTATATTA      60
CATCAAATTA TCATCATTAC TCTCCTGCAC AGTAACTTTT TTTCTGCTCC ACTAAGAAGC      120
TTACTCCCAT CCTGTTTATT CTCTATATCG TAGCTGGACT AATCTTTTCA AAGTGCAAAG      180
CCAATCACAA TACCACCTGC TTAAATCCA TCAGTGGCTA ACTTTTCATT CTAGGACGAA      240
AAGAAAATTC TATAACATGA CTTCAAAGGC TCTGCATGTC CTTCTATTTT TCTTGTCTCT      300
```

TCTAGTCTTT TCTTTGATGG TCTCCACTCC AGCCCTACTG GCTTCTTTCT GGAATCAATG 360
TCACCCACAA CCCGTCACGC CACTCGAG 388

(2) INFORMATION FOR SEQ ID NO:640:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

GAATTCGGCC TTCATGGCCT ACTCCGCTCT GGCCCAAGAG GAGGCCAAGA AGGACGAGCC 60
CAAGAGCGGC GAGGAGGCGC TCATCATCCC CCCCAGCGCC GTCGCGGTGG ACTGCAAGGA 120
CCCAGATGAT GTGGTACCAG TTGGCCAAAG AAGAGCCTGG TGTTGGTGCA TGTGCTTTGG 180
ACTAGCATTT ATGCTTGCA GGTGTATTCT AGGAGGAGCA TACTTGTAACA AATATTTTGC 240
ACTTCAACCA GATGACGTGT ACTACTGTGG AATAAAGTAC ATCAAAGATG ATGTCATCTT 300
AAATGAGCCC TCTGCAGATG CCCCAGCTGC TCTCTACCAG ACAATTGAAG AAAATATTAA 360
AATCTTTGAA GAAGAAGAGC TCGAG 385

(2) INFORMATION FOR SEQ ID NO:641:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

GAATTCGGCC TTCATGGCCT AGCAAGGAGA ACTATTGTCT TATGATCAG TTTGCCATCT 60
TTCTGTCTCT TATCATGTTG GTGGAGGTGG CCGCAGCCAT TGCTGGCTAT GTGTTTAGAG 120
ATAAGGTGAT GTCAGAGTTT AATAACAAC TCCGGCAGCA GATGGAGAAT TACCCGAAAA 180
ACAACCACAC TGCTTCGATC CTGGACAGGA TGCAGGCAGA TTTTAAGTGC TGTGGGGCTG 240
CTAACTACAC AGATTGGGAG AAAATCCCTT CCATGTCGAA GAACCGAGTC CCCGACTCCT 300
GCTGCATTAA TGTTACTGTG GGCTGTGGGA TTAATTTCAG CGAGAAGGCG ATCCATAAGG 360
AGGGCTGTGT GGAGAAGATT GGGGGGCTCG AG 392

(2) INFORMATION FOR SEQ ID NO:642:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

GAGTTGAAGT GGCCAAAAA TTATAACACT CTCCTACTTT CATATCTTGA TTTAATTTT 60
TTCCCTTACT TGTATTTTAT TTCTGAGTGG CTAATGGATC TTAGTCTAAG AACTGGAGGT 120
GGAGAACTCG AG 132

(2) INFORMATION FOR SEQ ID NO:643:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

```
GCACAAAGAC GCATTTTCATC TGAGTTTCCC TGAAAGCTAG AATAAGTTTG CTGGTGTCTAG    60
CTGGGATCCT GTCTTCTATA GCTTTGTATC AAGCAAATC AGCATTGTGT CTTGAATGCA    120
TGTCATGTGC AGCCTGCGTT TATGTGCGAC TGAGCACTTG GGTGGGGACA TCTTAAGGCT    180
GTTTATATTT CTTTTTCATG TGTGTTGTT GTTGTGTTG TTGTTGTTTT GGAGAGAGTC    240
TCGCCCAAAG CTCGAG                                256
```

(2) INFORMATION FOR SEQ ID NO:644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

```
GTGCTCGCAG CCNTGGTGGC CTGGCGCTCG GCGTNCCTTG TCTGCCTCGC TTTCTCCTTG    60
GCCACCCTGG TCCAGCGAGG ATCTGGGGAC TTTGATGATT TTAACCTGGA GGATGCAGTG    120
AAAGAAACTT CCTCAGTAAA GCAGCCATGG GACCACACCA CCACCACCAC AACCAATAGG    180
CCAGGAACCA CCAGAGCTCC GGCAAAACCT CCAGGTAGTG GATTGGACTT GGCTGATGCT    240
TTGGATGATC AAGATGATGG CCGCAGGAAA CCGGTATAG GAGGAAGAGA GAGATGGAAC    300
CATGTAACCA CCACGACCAA GAGGCCAGTA ACCACCAGAG CTCCAGCAAA TACTTTAGGA    360
AATGATTTTG ACTTGGCTGA TGCCCTGGAT GATCGAAATG ATCGAGATGA TGGCCGCAGG    420
AAACCAATTG CTGGAGGATG GCTCGAG                                447
```

(2) INFORMATION FOR SEQ ID NO:645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```
GCTCAGCAAC ATTTTAGGAA CAACATTGGT GAGTATATGA GAATAGCCGT GACCTCCATA    60
TTTCATCAGC CGGGTTTTCG TATGTATGTC ATGTGCTACC AGAATTCGAT CTTACAGGCC    120
CTCTTCCACC AGGAGACGCA CCCTGTGAAA AATGTAACT CATTAGATGT CATTGTCTT    180
TCATTTTCGC TTTTCAGGAT GCTTTCAACT TTTTACTCAT TAACCTATTG TGCTTGTCTG    240
AAAGATACTG ACTTCTACTG TGGCGTGTGT ACTGAGAGAC TCGAG                                285
```

(2) INFORMATION FOR SEQ ID NO:646:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

```

GGAGATTGA AGAAGAATTG AATGAAAGGA TGATTCAAGC AATTGATGGG ATTAATGCAC      60
AGAAGCAATG GCTCAAGTCT GAAGACATTC AGAGAATCTC ACTGCTTTTC TATAACAAAG      120
TACTAGAAAA AGAGTACCGG GCCACGGCAC TGCCAGCGTT CAAGTATTAT GTGACTTGTG      180
CCTGTCTCAT ATTCTTCTGC ATCTTCATTG TGCAGATTCT CGTGCTGCCA AAAACGTCTG      240
TCCCGGGCTA TCTCGAG                                         257

```

(2) INFORMATION FOR SEQ ID NO:647:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

```

GGGGCAGCAG TAAATCCAG GCCCGAATGG AACAGCAGCC CACTCGTCCT CCACAGACGT      60
CACAGCCACC ACCACCTCCA CCACCTATGC CATTGAGAGC TCCAACGAAG CCTCCAGTTG      120
GACCCAAAAC TTCTCCCTTG AAAGATAACC CGTCACCTGA ACCTCAGTTG GATGACATCA      180
AAAGAGAGCT GAGGGCTGAA GTTGACATTA TTGAACAAAT GAGCAGCAGC AGTGGGAGCA      240
GCTCTTCAGA CTCTGAGAGC TCTTCGGGAA GTGATGACGA TAGCTCCAGA CTCGAG      296

```

(2) INFORMATION FOR SEQ ID NO:648:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

```

GTGCANATGT ACGGTGACCA CCTGGCCCTT GACCGGGCGG CTCGAACCTG GCGGCCCTGG      60
GACCAGCGTC TTCTTCTCA ACAGCCCGTT CCCCAGAATG TCCAGCCACT CTTCTGGGGC      120
CGGGGCTGGG GCGGGCTCGG GCTCCATGGC AGCAAGGAAC TCTCGGGCCA GGGCCCCAGG      180
CTGCTCANCC TCCTCCGCCG GGGGTTGTCC CATGTCCTCC AGCGGTGGCA GCTCACTCAG      240
GTCATCCTCT TCCTCCTCTT CCTCCTCTC TTCCTCTCA CCCTCTGCAT CCTCAACCCC      300
ATCCAGTACC TCGAAGTCCT CGAG                                         324

```

(2) INFORMATION FOR SEQ ID NO:649:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

GAATTCGGCC	TTCATGGCCT	ACTTCCTGAT	ACAGATACAT	TTACTACAGA	AAATTCCTT	60
TATAGGTGTA	AATTTCTGTT	TACAACAGGC	GAGTCGAAAA	ATAATAAGAA	CAAAAGGAAA	120
AAAAGCAGTC	ATACTTTATT	TTAGGCAGTT	GAGGGGTAGC	TGAATAAGTT	ATCCTGTGTT	180
GTTTGTTTCT	GTTACTTATA	GCTCAAAGTC	ATCAATATGC	CAGGGTGGCA	TGTTGGGGA	240
TGGTGCATTC	TTGTCTTTTG	CAGTCATTTA	TCAGGGTGGC	GTTTCCTAAA	TTCTAACACA	300
GACCTCGAG						309

(2) INFORMATION FOR SEQ ID NO:650:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

GGTGACGCCT	GCTTCACATC	TCTAATGAAC	ACCCTCATGA	CGTCGCTACC	AGCACTAGTG	60
CAGCAACAGG	GAAGGCTGCT	TCTGGCTGCT	AATGTGGCCA	CCCTGGGGCT	CCTCATGGCC	120
CGGCTCCTTA	GCACCTCTCC	AGTCTTCAG	GGAACACCAG	CATCCCGAGG	GTTCTTCGCA	180
GCTGCCATCC	TCTTCCTATC	ACAGTCCAC	GTGGCGCGGG	CCACCCCGGG	CTCAGACCAG	240
GCAGTGCTAG	CCCTGTCCCC	TGAGTATGAG	GGCATCTGGG	CCGACCTGCA	GGAGCTCTGG	300
TTCTCTGAG						309

(2) INFORMATION FOR SEQ ID NO:651:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

GCAAGGGCAG	GCGGGTCCCC	CAGTCCCGCC	ATTACGGGTT	GTCAGACCGT	CTGCGTGTGG	60
CAGGGCTCCC	AAGGGCAGGC	GGGTCCCCCA	GTCCCGCCAT	TACGGGTTGT	CAGACCGTCT	120
GCGTGTGGCA	TTTTTTGGCT	TATAAGCTTC	ACCCACTCAC	CCCCAACCCA	CACCCACAT	180
CCCCCTGCCG	GCAGCCCCTC	AACCTAAGAA	GGCCAGAGCA	TATTTATTTT	CGGAGGGAGC	240
AGATTACTTC	TCCCAGAGAA	AGGAAAATCT	TGGAAAAGAT	TTAAAAACAC	AAATCTAAGC	300
CTTGACGGTT	TTTTTTTCCC	TTTTGACCCC	CTTCCCATCT	CTTCAGAATT	TATTCCCATG	360
GCTTTTTTTT	TTCTTGTCG	TGTTCTCGAG				390

(2) INFORMATION FOR SEQ ID NO:652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

GAATTCGGCC	TTCATGGCCT	ACCAAATTCC	CTGCCTGTGC	CTGCTGGGAC	CAGACTCCGC	60
TGTCATGAGG	GTGACATCCG	CCACCTGTGC	TCTTCTGCTG	GCTCTGATCT	GCAGCGTCCA	120
GCTGGGGGAT	GCCTGCCTGG	ATATCGATAA	ACTGCTTGCG	AATGTTGTGT	TTGATGTGTC	180
CCAAGACCTC	CTGAAGGAGG	AGCTTGCTCG	TTACAACCCC	AGTCCCCTGA	CAGAGGAGTC	240
CTTCCTCAAT	GTCCAGCAAT	GCTTTGCCAA	TGTCCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:653:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

GGTGTTCGGC	CACAGTTCGG	GACCTATGGT	AGAAAAATAC	TCAGTAGCTA	CCCAGATTGT	60
AATGGGTGGC	GTTACTGGCT	GGTGTGCAGG	ATTTCTGTTC	CAGAAAGTTG	GAAAACCTGC	120
AGCAACTGCA	GTAGGTGGTG	GCTTTCTTCT	TCTTCAGATT	GCTAGTCATA	GTGGCTATGT	180
GCAGATTGAC	TGGAAGAGAG	TTGAAAAAGA	TGTAAATAAA	GCAAAAAGAC	AGATTAAGAA	240
ACGAGCTCTC	GAG					253

(2) INFORMATION FOR SEQ ID NO:654:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCGGCCTCCC	AAAGTGCTGG	60
GATTACAGGG	GTGAGCCACC	GCACCCAGCC	TGTGAAATAC	TATTTTTATG	GTAAGCTAGA	120
ATTTTAAAC	TATTTCTTGC	AAGTTTAGGA	TTAAATGAAT	TACATTATGT	AAAATTACAT	180
CTTTGTCTGT	ATTACGTATT	TGTATACAGT	TGAATAGTTT	TGGTAACACG	TACCTTAGTG	240
CTTTACATTG	ATTGGCTCAT	TAATTTTATA	TTTGTAGTAA	TAATCATCTA	ATTTTATTAT	300
TGTACAATTC	AGTCTTAAAT	TATGTTATGA	TGTGAAAATG	GTAGCTTTCT	TGACTGTATT	360
TATTTTTGTA	GTAGTGGGCA	ATGTAATTAT	CACACATAAA	ATGAACTGTG	AGACTTTTGA	420
GCCTGAAATA	TTATTCATAT	TATAATGCTC	CTCGAG			456

(2) INFORMATION FOR SEQ ID NO:655:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

GAATTCGGCC	TTCATGGCCT	AGTATATACA	TGCATTTAAT	TGTGATTTTA	TCACCTTTCC	60
CATTTCTTTC	CCCACAAGCT	GGCATTTCAG	TAGTTGCTTT	TGAATAATGG	TTTTGGTTAC	120
CTGGGAAGGC	AGGCCAGAA	CCCATTTCTT	TGACTTGCTG	TTCCGGGCTG	TGTTACATG	180
ACTGCTGTCT	AGCTGATGCA	TTTTTCACAT	TTGTCAACTC	TGGTTAGAAA	CAGGTCCTCA	240
GGAGTATTCT	CTAACCTGAT	ATTTTCTAAA	AAGATATGTT	GATTCAACTT	TGTTTAGCAT	300
CCTACTTTCT	AGATTGTGGG	GCTCATTTTG	CCAGGGCCAA	GCTACCAGAA	AAGTAGAAGT	360
GGAGATTACC	TGGTATGTAT	CTCTCTGGGT	GCCCCAGTTA	GAGCTGCCAC	AGCTCAGGAA	420
AAAGATGAGG	CATAACGACC	TTGAATGTAA	TTGGAGTAAG	TGACAAAATA	AGAACTACCC	480
TGGGAAACTC	GAG					493

(2) INFORMATION FOR SEQ ID NO:656:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

GAATTCGGCC	TTCATGGCCT	ACTTGGCCTT	TGTTTGTGTT	TGCCTTTGTC	AGTCTCCTGC	60
CTCTGGATGG	GTTTCTGTTT	GTTTCCAAAC	TGTCTGGGGC	TGTGCACCAT	GGAGACAGTG	120
TCCTGGGCTG	CCTCTAGCCT	GATCTGGTTA	GAATAAGCCC	CTCTCCTTTG	CATGCGTCTC	180
CAACCTGACA	TTTGGAGCAT	CCAAAACAAA	TCATGACATT	CCCAAGTAAA	GATAGAAACC	240
ACCGTCTCCA	CTCCACTCGA	G				261

(2) INFORMATION FOR SEQ ID NO:657:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

GAATTCGGCC	TTCATGGCCT	AGATGGTCTC	TGCTGCTCTT	GCCTCTAGTT	CATGGAGATG	60
TGTCTCTGTT	CAGGCCAAGA	TACAGCCAGC	CAGGCCTGTC	GTCTGGGACC	CAGGAGGCCT	120
CTGATGACCA	AGGGCTTTCA	CATCCTAAGT	CATTTGGAAG	GAGGCCTTGA	GAACAAAGTC	180
ACCTTTGTCA	CTCCAGTGA	ACTGAATGAG	GAACATGCTG	TCTCCTGTCT	TGGCCTCCCC	240
TTTCATGAGA	TACTGGGGAG	AAGAGAACAT	TCCTCCTGGC	TTAGTTGTAG	CAGACCCAGA	300
CCTGTGCCCA	GCTTTGGTCC	CCCTTCCCAA	CTTCTGAAGC	ACGTGCTGCA	GAGCCACCTT	360
GGTCTGAGCA	CCTGAGGACC	AGCCCCTCCT	CCCTCAGTGC	GGGTCATCTC	TTGGGGGATT	420
TTCTTAAAGT	GAAGAAAGGG	GGTGGGGAAC	CATATTGCCC	CTCCCCTCCC	CATCAAACCT	480
CCTTCATTTA	ACTTGCTATA	AAATGAGTCA	TATAAAGAAA	CTCTATATGG	GTGAGGTATA	540
TCCCACCTTCT	GTGAAAACAT	TACAAATCAA	ACCGCTTCTC	TCAGTTTATT	TAAGATGCTT	600
TTGTTGCAAG	CGGTACTCGA	G				621

(2) INFORMATION FOR SEQ ID NO:658:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 567 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

GAAGTCTTGG	AGATTTCTAG	TTTATTCATT	AACAGCAGAA	GGATGGAAGA	AAATTCCTCT	60
GGCAATACCA	TGTCAGCCTC	TTCGATGTTT	AATACAGAAG	AAAGAAAATG	TTTGCAGACT	120
CACAGAGTCA	CGGTGCATGG	GGTCCCAGGG	CCAGAGCCCT	TTACCGTTTT	CACTATTAAT	180
GGAGGCACCA	AGGCAAAGCA	GCTTCTGCAG	CAAATTTCTGA	CAATGAACA	AGACATCAAA	240
CCTGTTACCA	CAGACTATTT	TTTGATGGAA	GAAAAATATT	TTATATCTAA	AGAAAAGAAT	300
GAATGTAGGA	AACAACCATT	CCAGAGAGCC	ATTGGTCCAG	AAGAGGAGAT	CATGCAAATT	360
TTAAGCAGCT	GGTTTCCAGA	AGAGGGATAC	ATGGGCAGGA	TTGTCTTAAA	AACCCAGCAG	420
GAAAACCTAG	AAGAGAAAAA	CATGTGTTCAA	GATGACAAAG	AGGTGATCTT	GAGCTCAGAG	480
GAGGAGAGTT	TCTTTGTCCA	AGTGCATGAT	GTTTCTCCAG	AGCAACCTCG	AACAGTCATC	540
AAAGCACCCC	GCGCCAGCAC	ACTCGAG				567

(2) INFORMATION FOR SEQ ID NO:659:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 388 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

GAATTCGGCC	TTCATGGCCT	AGGCCCTTTG	GCCCTGGGGT	GGGGGTGCTT	ACTACATCCC	60
TGGAAGGTGC	AGGGAGGCTG	ATGGCCTTGA	TCTCTAACAC	AAACAGGAAC	CAGCTTCCTC	120
CCTCCCCCAC	CCTGGGTTCC	CAGGGCCTCC	GGGTGTGAGA	TCCTCCCCCA	CTGCAGTGCC	180
CCACCCGCTC	CCCACAGAAG	CCCGGAGAGT	GGCTCTGTCA	CCAGAGGTGT	CATTTCCTCAG	240
CTGTCTGTGG	GAGGTGAGTG	AGCAGGGAAT	GTGTGTGCTG	GGTGTGGGAA	CTCAGCCCAA	300
TCTAAGAGAA	GATACTCTTG	GCTTCCTCCC	CCTCAGAGGA	GCAGCCGCGT	CCCTGGTCCT	360
TGTGCACTGA	CAGTCCCGGA	GTCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:660:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 491 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

GAATTCGGCC	TTCATGGCCT	AGCCAGGAGT	TGAGGTGGAA	GTCACCATTG	CAGATGCTTA	60
AGTCAACTAT	TTTAATAAAT	TGATGACCAG	TTGTTAACTT	CTGTTGGTTT	TTATTCAGAA	120
TACTGGCAGA	TTTAGGAAT	ATAAAGGTGT	ACTATGAGAC	TTCCACTTTT	CAGGTGGAAT	180
ATATGGGTAT	CTTAGAGTGG	TCTATCCTGT	TTTCGTTGTC	GTTTGAGTCA	TTGAAAACCT	240
GGATTCCGTT	AACTACATAA	TATGTGAGAC	CTGACTGGTT	TTATTGGACA	CTGGCAGTTT	300
ATAACTTTGG	CATACTCTAG	ATAAATTCTG	ATTGGTATGG	GGTGTAAAGG	TTTCTGGGGC	360
GTTTGTAAATG	CACACCCATG	GTTGAGAACC	TAGTGCGCTA	GTAGGCACGT	GTTAAAAAGC	420
TAGTAACTAA	TATTTTAAAA	TTAACCAAGT	TTAACGTCCT	TAAAAAAGGA	TTAAGTGGCA	480
AGGACCTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

```

GAATTCGGCC TTCATGGCCT ACCTCAATAT GCTATCAGAT TCTGAAAATT CCCAGCATCT      60
GGAAC TTCAT GAGCCACCAA AAGCTGTGGA TAAGGCGAAA TCCCAGGGG TTGATCCTAA      120
GCAGTTGGCA GCAGAACTCC AGAAGGTTTC ACTACAGCAG TCACCGCTGG TTCTGTCATC      180
AGTTGTTGAA AAAGGATCTC ATGTTTCATTC AGGTCCTACA TCAGCAGGAT CCAGTTCCGT      240
TCCCAGCCCT GGGCAACCAG GGTCCCCCTC AGTGAGCAAA AAGAAGCACG GCAGCAGCAA      300
GCCACTCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

```

GAATTCCTAT GGCCTACTTC CGGCGCAAGT GGCTTCTGAT AATCATGGCG CCCCTCGGAA      60
CAACTGTATT GCTGTGGAGC CTCTTGAGGA GTTCTCCGGG CGTGGAACGG GTCTGTTTCC      120
GGGCTCGAAT CCAGCCCTGG CACGGTGGCC TGCTCCAACC GCTACCTTGC TCTTTCGAGA      180
TGGGGCTGCC ACGCCGCCGG TTCAGCTCCG AGGCCGCAGA ATCTGGTAGC CCAGAGACCA      240
AGAAACCTAC ATTTATGGAT GAGGAAGTTC AAAGCATACT CACGAAAATG ACAGGCTTGA      300
ACTTGACAGAA GACTTTTAAG CCAGCTATAC AAGAACTGAA GCCACCAACC TATAAGCTAA      360
TGACTCAGGC ACAGTTGGAA GAGGCTACAA TACAGGCTCT CGAG                                     404

```

(2) INFORMATION FOR SEQ ID NO:663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

```

GAATTCGGCC TTCATGCCTA ATTTGTGTGA TGGCCAAAGA GTTCTTATCA GAAGTGGCAA      60
AAACTACATA CAGGTTGGCT TCCAATAACA TGAGCCAGGT ATTTTTCAGT AATATTTTGA      120
AGTGTCTTTT CTTTCTAGAC ATGCACATGA TGGTGTCCAA GCCAGAACAG TGGGTAAAGC      180
CAATGGCTGT AGCAGGAGCC AATCAGTACA CCTTTCATCT CGAG                                     224

```

(2) INFORMATION FOR SEQ ID NO:664:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

```

GAATTCGGCC TTCATGGCCT AGGTCTACCA AAGTGAGGAC ATTACTGCAG ATATTCTTCT    60
CCTTTTCTCC TACATTATCA TTTCTCTTTT ATAACATCAT TTCTGCAGAT ATGTAAAAAT    120
ACATCCCATC TTCAAAAAGA AAAACAAAAA TCTGACTGTA CTTCATATCC CCTTCTAGAC    180
ATTGCCACAT TTCTCTACTT CTGTTTACAA CAAAACTCCT GGAAAGATTG GTCTATACTG    240
GCTTTCTCTA CTCTTTTAC TTCCATTCCCT TTCCTAACCA CTCTAAACAT GCTTGGGTCC    300
CCACCACTGT AACAAATATA ATTTGTGTCC AATAACCAGT GATCTCTGTA TCACCGTTTC    360
CAAGGGTGAG ATCTCAGACT TCACCTTTCT GGATTGATTG ACACATTGGA CTCAGTTGGT    420
TACTCCTCAC TTCTTGAAAC TGTCTTCACT GGGCTTTTGT GACTCCATAT CTCGAG      476

```

(2) INFORMATION FOR SEQ ID NO:665:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

```

GAATTCGGCC TTCATGGCCT ACTCTCTACT CCTTTGTGCT CAATTTCCAT TGTGGAATTC    60
TGCATATATG ATCTTGTTGC ACATTTCTAC ATTTCTCTAG CCCAGAAGGC CTTCCCTGTT    120
CACTATCTCC TTCTTTTAC TAACTCTTAC TATATTTCCA GGCACAGTTC AGGCATCAGA    180
TAGCCCTATT TGTTCCAAC TTACCGTAG GTCAGATTAT AAGCCTTGCA ATCTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:666:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

```

GAATTCGGCC TTCATGGCCT AGACCATTTT CATTTGTTAT AGTTTATTTT TTATAAATAG    60
TGCTTTCTGG AATATCCTTA AATACCTCTA TCTTTTAAAC ATCCTTGTGT ATACATCTTT    120
TCTCACACTT GGCTTCCTCT TGAATAGAA TCTCCTGGAA ATTAGATAGC TGAGGTAAAA    180
GTCCCTGAAC CTTTACAAA TTGTACACA ATAAATACCA AACTGATTTT CAGGAATGTA    240
GTCCCATCAA CAGTGTGCTT GTTTATCCAT ATCGTTGCTG ATCTGAGTTT TGTCAGTCTA    300
TTGATTCCTA CCAATCTGCC AGTATCATAG ATTTTAAAT ATTTTGTG TGTCATCTCGA    360
G

```

(2) INFORMATION FOR SEQ ID NO:667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

GAATTCGGCC	TTCATGGCCT	ACTCATAAC	AATGAATACA	AAAACCTGGAA	CTCTGCAATT	60
TAATACTGTT	TCCAAACTGG	ACACTGGAGA	ATATTCCTGT	GAAGCCCGCA	ATTCTGTTGG	120
ATATCGCAGG	TGTCCTGGGA	AACGAATGCA	AGTAGATGAT	CTCAACATAA	GTGGCATCAT	180
AGCAGCCGTA	GTAGTTGTGG	CCTTAGTGAT	TTCCGTTTGT	GGCCTTGGTG	TATGCTATGC	240
TCAGAGGAAA	GGCTACTTTT	CAAAAGAAAC	CTCCTTCCAG	AAGAGTAATT	CTTCATCTAA	300
AGCCACGACA	ATGAGTGAAA	ATGATTTCAA	GCACACCCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 266 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

GAATTCGGCC	TTATCCTACA	ACTTTGAATA	GACATAAGAG	TGCCTGTCTG	CATAAACCTT	60
CATCAACATT	GGTATTATCT	TTCTTTTTC	TCTTTGCTAA	TTGGATAAGT	TTTAAAAAGT	120
GTAACACATT	TAGTTTGCA	TAGCTTTGAT	TATAAGTGAG	GTTCGACATT	TTTTTTCATT	180
TCTTTACACT	TTAAAAAATC	TAACCGTGGC	AACGTTTGCA	GGTGTGTGTT	CTTCTTATGT	240
TGCTGAGTGT	TATTTACTCC	TGGACG				266

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 452 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

GAATTCGGCT	TCATGGCCTA	CAAAAAAGAA	ATTAAGAAGC	TCCTAAAGAC	GCAAAGAAAT	60
CATCTACTCC	TCTGTCTGAA	GCAAAAAAAC	CAGCTGCTTT	AAAACCAAAA	GTACCCAAGA	120
AGGAAGAGTC	TGTCAAGAAA	GATTCTGTTG	CTGCCGGAAA	GCCAAAGGAG	AAGGGGAAAA	180
TAAAAGTCAT	TAAGAAGGAA	GGCAAGGCCG	CAGAGGCTGT	CGCTGCAGCT	GTCCGGCACTG	240
GAGCCACCAC	AGCAGCTGTC	ATGGCGGCAG	CTGGAATAGC	AGCCATTGGC	CCTGCCAAAG	300
AACTCGAAGC	TGAGAGGTCC	CTTATGTCAT	CTCCTGAGGA	TCTAACCAAG	GACTTTGAAG	360
AGTTAAAGGC	TGAAGAGGTC	GATGTAACAA	AGGACATCAA	GCCTCAGCTG	GAGCTAATCG	420
AAGACGAAGA	GAAACTGAAG	GAAAAACTCG	AG			452

(2) INFORMATION FOR SEQ ID NO:670:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 284 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

GAATAATTGA CTGAAAGTGT AGTGTGCGAGT GGTAGAATAA GTGCTGATCC TGGGGTCTTA	60
TACCAATGTT GCTAACTGTG AGCAGCCTTT GTCAAATCAC TTGGCTTCAT TTTCAGTGGC	120
CTAAGAGTAA TAGGTTTAAT TATTTCCATA ATTCCTTTAA GTTTTTACAT TTTCTGAGTT	180
CATCTTTTGT GTTTTTCCTG GCATTTTACT ATTCCTCTTT CCTGCTTTTG GCTATTTTCT	240
CAACAGGTCC ACGACTGGAA TTTGAAAGCA AGAAACATCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:671:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 235 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

GAATTCTGGA AGCAGCCTAT CATCGCTCCG TCTGCCCTCC ATACACAGCG TTTGTGTGTG	60
TTATGCCAAA CTGCTTGGTG TTTTCCAACC GTGGACCATG ATATCTCACT TCCTTAACCT	120
TACCTTCATA TGCTTTTCCT TTGTGTCTTC TTCTGAAATG CTTCTTCCTT TTGTCCAGGC	180
TGACTCCTGT TTGTCTGAGA CATGTGTCTC AGGAAGCCTT TCCGTTCCCC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:672:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 370 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

GAATTGCGCC TTCATGGCCT AGCATTGATG GCCCATGTAG AAGACCTGAT CATTAAGACT	60
ATAATCTCTG CTGAACTAGC TATTGCTACT GCCTGTAAAA CCTTTGTTCC TCATCGCAGC	120
AGTTGTTTTG AACTCTATGG CTTTGACGTG CTCATAGATT CTA CTCTGAA GCCATGGTTG	180
TTGGAAGTGA ATCTCTCTCC TTCTTTGGCC TGTGATGCGC CTCTGGACCT AAAGATTAAA	240
GCCAGTATGA TTTCAGATAT GTTCACTGTT GTAGGATTTG TGTGCCAAGA TCCTGCCCAG	300
CGGGCATCAA CTCGGCCAAT TTATCCCACC TTTGAGTCTT CCAGGCGAAA CCCTTCCAG	360
AAACCTCGAG	370

(2) INFORMATION FOR SEQ ID NO:673:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 295 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

GAATTCGGCC TTCATGGCCT ACACAGACAT CATCATGCAG AAGATGACCA TTTCCAACAT	60
GGAGGCAGAT ATGAATAGAC TCCTCAAGCA ACGGGAGGAA CTCACAAAAA GACGAGAGAA	120
ACTTTCAAAA AGAAGGGAGA AGATAGTCAA GGAGAATGGA GAGGGAGATA AAAATGTGGC	180
TAATATCAAT GAAGAGATGG AGTCACTGAC TGCTAATATC GATTACATCA ATGACAGTAT	240
TTCTGATTGT CAGGCCAACA TAATGCAGAT GGAAGAAGCA AAGGAAGTAC TCGAG	295

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

GAATTCGGCT TCATGGCCTA CCTGCCTCGA GTGATGGGTA TCGGGATGGG TATCGGGATG	60
GCCACGCCG GGATATGGAT CGATATGGTG GCCGGGATCG CTATGATGAC CGAGGCAGCA	120
GAGACTATGA TAGAGGCTAT GACTCCCAGA CTCGAG	156

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

GAATTCGGCC TTCATGGCCT AATAATTTGT AAGTTAAAAT AAGTAATACA AATTAAATGC	60
AAATCAAATG CCTGAAGAAG AAGCACGAAT ACCTATTTTG AAATCTGCTG TAGCCGAGAC	120
AGCTTCTAAA TCTCCCACTT GGGTTCTGTT TCTGGAAGGT GTGGGTCCTG TGGTAGCTGG	180
AGTGTTGGTG GCCATCTTGG TGCTGGCGGT CCTCATGCTG ATGTACTACT GCTGCAGACA	240
GAACAACAAA CTTGGCCAAC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:676:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

GAATTCTGGA TCAAAACAGA GGAAAATGGT GGGAAATCTT GTATAGATAC AGTCTAACAT	60
AGAAACCCAT GCCCATCAGC AGTAATTTCC AGTCCCCCAG TCCTCCAAGC CCTGGTACTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

```

GAATTCAGAG ATAAAGCTAA AGTTCATTG GAGCACCAGC CCAAATCCTG GACTTCTTTC      60
TGCTCCTCCT CAGAGGTTCT CTGGTTATAA GTTTTATGTG TATCTTGCCA GAATTTTTC      120
TATGTTATTA ATACAAATAT ATGTAGCCAC AGAAATTATA GCGTGTCATT CAGCCTTTGG      180
TTTATTGTC ATTGATAGTA TTATGTCAT ATCACTCTAC AACTTCTTAG GCCATGAAGG      240
CCG                                     243

```

(2) INFORMATION FOR SEQ ID NO:678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACC ACCTATGGAA GCCAAGTGTT CCCGGGCCAT      60
GAGACCTGCC CAATCAAGCA GAAACACATT TGGAGAGACA AACAAATCAGC ACACGCTCGA      120
G                                     121

```

(2) INFORMATION FOR SEQ ID NO:679:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

```

GAATTCTAGA CTGCCTCGA GTACCTGATC TTTTACTGTC TCTATAGGTT CATCTTTTTC      60
TTCCCTTTGT TAATTCTACT TTTTAGTTT TTTGCTAGAT TTTTCTTGCA ATTGGATAGG      120
CCCATTTAAC CTATTTTGCC TCCACTCTAA ATTCACTACT CCAAGAATTG GTTCACTCT      180
TCCAAATTTT GTATATAAGC CAGAGTTCTG CATAAAGGAA AATACTTAA TTCTTTCTAA      240
TCTAATGTGG TTTCTGCAT CTTTCAGGAA ACTTTTCCTC GAG                                     283

```

(2) INFORMATION FOR SEQ ID NO:680:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

```

GAATTCGGCC TTCATGGCCT AGGGTTTGTG GCTAAAAATT ATGCTTAAGA ACACATCTAA      60
CAAACCTAAA GCTGCAAAGA CATAATGTTA ATGTAGGTGA AAATTTCACT TGTGTTTATT      120
CTGATAGACA AAATTGTATT TTAGATGAGA AGCAACAATT TTCATGTTGT ACTGAGATTG      180
TTAGTAATGA AATACTTCCA AATATTAGTG ATGGTAGAAA TCTAGTGTAG GGCTCTTTGC      240
TGAGAAGGGA AAAAAGTCAC ATAAGAAATC TACTTTTCAG TAAACTGCAA ATATGTGTGC      300
TTCAACCTAT AACATATTCT GTCACTTTGA GCTTGTGATA TTGACAGAGA ATGAAAACCT      360
GATAAGACTC GAG

```

(2) INFORMATION FOR SEQ ID NO:681:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

```

GAATTCGGCC TTCATGGCCT AGAGCGACTT CGACACCATG CCAGACATTG AGAGTGATAA      60
AAACATCATC CGGACCAAGA TGTTCCTTTA CCTGTCAGAT TTGTCCAGGA AGGACCGGAG      120
AATTGTCAGC AAAAAATATA AAATTTATTT TTGGAACATC ATCACCATTG CTGTGTTTTA      180
CGCGCTGCCC GTGATCCAGC TGGTCATTAC CTATCAGACA GTAAGTGCTA AACCTAGCCC      240
CAAACCCCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

```

GAATTCGGCC TTCATGGCCT AATCGAGGAG AATGGAGACC AAACCTGTGA TAACCTGTCT      60
CAAACCCCTC CTCATCATCT ACTCCTTCGT CTTCTGGATC ACTGGGGTGA TCCTGCTGGC      120
TGTGAGAGTC TGGGGCAAAC TTAATCTGGG CACCTATATC TCCCTTATTG CCGAGAAGTC      180
CACAAATGCT CCCTATGTGC TCATCGGAAC TGGCACCCT ATTGTTGTCT TTGGCCTGTT      240
TGGATGCTTT GCTACATGTC GTGGTAGCCC ATGGATGCTG AAACCTGTATG CCATGTTTCT      300
GTCCCTGGTG TTCCTGGCTG AGCTCGTAGC TGGCATTTCG GGGTTTGTGT TTCGTCATGA      360
GATCAAGGAC ACCTTCCTGA GGACTTACAC GGACGCTATG CAGACTTACA ATGGCAATGA      420
TGAGAGAATG CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```

GAATTCGGCC TTCATGGCCT AGTCCCACT TTATCTCTTT AAACGGTTTC TTTTCTCTT    60
TTTTTTTTTA GACCTCTCAG GGATGAAACA TTTTATTTT TAAACTAGTT TTTTTTTAA    120
ATAACATTAA CACATGCTGA ATGCTTAAAT CTTTTTAGAA TTCAGAAAGG TAAAATGAAA    180
GTCACCATTG TCATTCTCAT CATCTTACTC CCAGAGATGA TTGTTATTAA TATTTCCAGA    240
AATTTTGCTT GTATATGCAA ACAGCAATAT ATTGTAGCTG CTCGAG                    286

```

(2) INFORMATION FOR SEQ ID NO:684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```

GAATTCGGCC TTCATGGCCT ACCCTTACCA GATACTGAAT CTGCCAGTGC CTTATTTTGG    60
ACTTCTCAGC CTCCTGGGCT GGGTGAGGTG GTTCACTACC AGCCTTGGCA CCATAGTGAG    120
ACTCCCATCT CTACAAAAAA AAAAAAAAAA AAACCTTCTG TTGTTTGTA GCTACCCAGT    180
TTATGGTATT TTGTTACAGC AACCCAAACA GTCTGAGACG TTTAGCTTAA CTCCTGTATG    240
CACTAGATAC AGTCTGCACT TTGACATCAA TCTCGA                    276

```

(2) INFORMATION FOR SEQ ID NO:685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```

GAATTCGGCC TTCATGGCCT ACTAAGAATA GGAAAAAAAA TAACACTATG ATACCACAAC    60
CTTATTACAT CAAACTGCTT TGGGCTTTAT CCTCTTTAAA GTGTGCTCAG GTGTTTCAGCC    120
ACGAGGTTTC TGACAGCCCT CATAAGACCT TCGAG                    155

```

(2) INFORMATION FOR SEQ ID NO:686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```

GAATTCGGCC TTCATGGCCT ACTTTGAAGA GTACGATTTC AAAACCAGCA ATTGGTGTGA    60
ATGCAAAAAC ATTTGTTGGC ACCATTTATT TAAAAAAA AAAAGCTGTA TGCAGCAGAA    120

```

```

AGCCTTATAC AAGTTGTTTT TCTTTTTTTC CTTTTTCTTT TTTTGGTAC CTTCAATTTCT 180
GTTACTTTTA TATAAAATTC TCTGCAAAGG AAGGCCTCTC TTTGGACTAC AATTTGGAGG 240
CAGCCACTTG TTGTGCCTGC TTCTGTAAA GAATGTGGAT ATCAAGCCCC CCCGACTCGA 300
G 301

```

(2) INFORMATION FOR SEQ ID NO:687:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 254 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC TTCATGGCCT AATTTTACA GAAATTATTT CCACAATCAG AAGTACTGTA 60
CTGATTGCAT TTCTTTGTCT CAAAAAGTTT TCCTTATGTT TCTCAAAGCA GTATTTACAC 120
TAATTATTCA ATTCTTATCT TTCTTTCAGT TTTCTCCAAT AGACTGTGAG ATCTTTGAGG 180
GCCAGGTTGA CATGTCTCTG ATACCTACAC CCTATGCAGC TCCTAGTGCA GGACCTTGCA 240
GTGACAAGCT CGAG 254

```

(2) INFORMATION FOR SEQ ID NO:688:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 261 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```

GAATTCGGCC TTCATGGCCT AATATTTATT TAGATGCTAT TATTACTGTT TGGACTTTTA 60
TTTTGGCAGG CTTTGTCCA GACTGTAGGG TTTTCCAATG TGAATAATGA CCACTCCTGC 120
CTCTCCCGTG GTGTATTTG GGCACCCTCC CACCCGGCTG CATACCCGGC CAGGGCTCCC 180
ACAGAGACAA GGAGGGCACA GGTGTCTGCC CCTCTTTGA AATCGATATA CACACATCCA 240
CGCATATGCC GCCCACTCGA G 261

```

(2) INFORMATION FOR SEQ ID NO:689:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 214 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```

GAATTCTAGA CCTGCCTCGA GCTTCTGGCT GTTGTCTTTG CTGGGCATCC TTTTACAAG 60
TGGAAGAAGT AGGATGGCTT TCCAAAGTCT TCTAGAAATG AAGTTCTTTC TCTGTGCAGC 120
TTTCCCCCTT GGAGCAGGAG TGAAGATGTT TCATTATCTT GGGCCTGGGA AACCACTTCC 180
CCAGGCTTCT CCTCCCCC ACCCCCGACT CGAG 214

```

(2) INFORMATION FOR SEQ ID NO:690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```

GAATTCGGCC TTCATGCCTA CAAACTTAAA AGTAAATCTT TGGAAATCAG ATAGTAGTCT      60
TGAAACTATG GAAAACACAG GAGTGATGGA TAAGGTTTCAG GCAGAGTCTG ATGGGGACAT      120
GTCTTCAGAT AATGACTCAT ACCACTCTGA TGAATTCCTT ACAAATTCTA AGTCTGATGA      180
AGACAGGCAG CTAGCTAACT CATTAGAGAG TGTAGGGCCA ATAGATTACG TTCTTCCTAG      240
TTGTGGTATT ATTGCCTCAG CGCCTCGATT GGGCAGTCGG TCCCAGTCTC TTAGCAGCAC      300
ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:691:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```

GAATTCGGCC TTCATGGCCT ACTCCATATT TATTTAGATG CTATTATTAC TGTTTGGACT      60
TTTATTTTGG CAGGCTTTTT TCCAGACTCT AGGGTTTTC AATGTGACTA ATGACCACAC      120
CTGCCTCTCC CGTCGTCTCT TCTGGGCACC CTCCACCCG GCTGCATACC CGGCCAGGGC      180
TCCCACAGAG ACAAGGAGGG CACAGGTGTC TGCCCCCTCT TAAAATCGA TCTACACACA      240
TCCACGCACA TGCACCCCG AGGAAACGAA ACCCACTCTA GAAAACGCGA CCTTGGCCGC      300
ACCTAAGCA GCCAGCCGTG AGTGCAGACC CCTTGGCCAG CGTGGCGCAG TGGCCCTGAG      360
CAGTAGTGGC GTGTGTGTAG ATCAAGTCGG ATCTAGTCCA GCTCGGTTCA TTAGCGATCC      420
ATGTAATCTG ACGTCATCTT GTCTCGAAGT CTCTTTT TTTT GGCCAGGCC TTGAAGAATA      480
CACTGGACTC GAG

```

(2) INFORMATION FOR SEQ ID NO:692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```

GAATTCTAGA CCTGCCCTG CCTCTGCAT CCAGCCCCCA ACATGGTGCC AAAGCTTCCA      60
GAAGCCAAAA AGCTTCTGAT TTTTAAGGTA GTGGGCATCT CTCTCCTAAT GACGAAGCTG      120
CTCAGCAACT CCACCTGCCC GCCGCAGGAA GGAGCAGTCC CCTGCTATCC CTGCAGCCAC      180
TCCAGCACA CCCGCACACA GCCAGCACCA CCGCCCACTC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:693:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```
GAATTCGGCC TTCATGGCCT ACTGGCTCAT ACAATACATC AATAAGTATG CAACTTTTCA      60
TTTGTATTAT CGTTGCTGGA AGTGGGAAAT ACCCCATCTT CCCAGGAGTG AAATGGTTCT      120
ACTTTCTCTC CGTGGTGCCC TGTATCATTA CTCAGCTCTG CTGCTGCTCT CCGCAGCCCC      180
TAAAAGTAGC ATGGATCGGG GAAGAAGGAA GGACGGCAGG AAGGCAGGCA GAGATCCTCA      240
GGCAGGTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 294 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

```
GAATTCGGCC TTCATGGCCT AGTGTGTGTG TCGTGTGTG TGTGTTTACA TATAAAGTTT      60
TTTGGTAACA AATAAATTTT GTTAGAGCTA GTCAGATTTT TGTTTGCTTA ATCTGCTAGT      120
TTTGGTAGGT TATATTTTTC AAGGAATTTG TCCATTTCAC CTATGTTGTT GAATTTTGGG      180
TGTAACGTTT TTCATTACTC TTTTCTTTT AATATCTGTG GGATCTGTAA TGATGCCCCC      240
TCTTTCATTC CTGATATGAG TAATTCTTAT TCTCTTTTG TCTATCAGCT CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 246 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

```
GAATTGGCCT TCATGGCCTA ATTGGGACCA AATAGAGGCT CACAGATATT TGGATTATTT      60
TATGTGCTTA TTATTAAATA AGGAAAGCAT TTTGTGATAT GTGGAAGACG CTATGTGAAG      120
TTTACCTAT CTTCTCAAAG ACCTTTTCTT TTGTATTTTC TTTTGGTGTT TCTTAAAGCC      180
AAACAAAGAA ATGTTCTTAA GGAGACAGGG TGGGTTTTTC TGTGGCCTA GGCCATGAAG      240
GTCGAG                                     246
```

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 349 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

GAATTCGGCC	TTCATGGCCT	ACCCTAATAT	AAAAAGCATT	GTCACCATGT	TGATGCTGAT	60
GCTATTGATG	ATGTTTGCTG	TCCACTGTAC	CTGGGTCACA	AGCAATGCCT	ACTCTAGTCC	120
AAGTGTAGTC	CTGGCCTCAT	ACAATCATGA	TGGCACCAGG	AATATCTTAG	ATGATTTTAG	180
AGAAGCTTAC	TTTTGGCTAA	GGCAAAATAC	AGATGAACAT	GCACGAGTAA	TGTCTTGGTG	240
GGATTATGGC	TATCAGATAG	CTGGAATGGC	TAATAGAACT	ACGTTGGTGG	ATAATAACAC	300
CTGGAATAAC	AGCCACATAG	CACTGGTGGG	AAAAGCTATG	TCTCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

GAATTAAATA	AGTTACTGAC	TTTGTGACTT	ATTTAATTCA	TATTAATATA	TTAGGCTTCC	60
CAACTGACGG	TGTTGCAGTT	GAGCTAGCTT	CCAGTTTGG	AGAAACACAT	AGTTGATTAG	120
TTCTGTCACT	AATTTTCAGG	GATATTAATA	TAACCTTTGAT	ATTAGTGAGA	AATTTTCTTT	180
CAGTAGTAAA	ATGTTTTCTA	ACTTAGGAGC	TGTTCTCGAG			220

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

GAATTCGGCC	AAAGAGGCCT	AGCAGAGCTT	TCATATCCAC	GATGCGTTTT	CTGGCCGCCA	60
CGATCCTGCT	GCTGGCGCTG	GTCGCTGCCA	GCCAGGCGGA	GCCCCGTCAC	TTCAAGGACT	120
GCGGCTCTAA	GGTGGGAGTT	ATAAAGGAGG	TGAATGTGAG	CCCATGTCCC	ACCGATCCCT	180
GTCAGCTGCA	CAAAGGCCAG	TCCTACAGTG	TCAACATCAC	CTTTACCAGC	GGCACTCAGT	240
CCCAGAACAG	CACGGCCTTG	GTCCACGGCA	TCCTGGAAGG	GATCCGGGTC	CCCTTCCCTA	300
TTCTTGAGCC	TGACGGTTGT	AAGAGTGGAA	TCAACTGCCC	CAGTACAGTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

GCGATTGAAT	TCTAGACCTG	CCTCGCTTCC	CCACCCTTAC	TAACATTAAC	GAAAATAACC	60
CCACCCTACT	AAACCCCAT	AAACGCCTGG	CAGCCGGAAG	CCTATTCGCA	GGATTTCTCA	120
TTACTAACAA	CATTTCCCC	GCATCCCCCT	TCCAAACAAC	AATCCCCCTC	TACCTAAAAC	180
TCACAGCCCT	CGCTGTCACT	TTCCTAGGAC	TTCTAACAGC	CCTAGACCTC	AACTACCTAA	240
CCAACAACT	TAAATAAAA	TCCCCACTAT	GCACATTTTA	TTTCCCCAAC	TCCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

GAATTCGGCC	TTCATGCTTA	GCCTCAGCTC	TTTCTTCTGG	GTTGTTTGTA	TTTCTTTTTC	60
TGTCCCAAAC	AGTTTCCCC	ACAAAAGAA	CTTTATGTCT	TTCTCTGTCT	TCCTCAGTC	120
CTTCCAGTCA	GCAGCCTGTG	ATTGGGCTTT	TCCCCTCAGA	AACGAACAAT	CCAGAACCCA	180
CTGTTTAAAA	CAACTGTATT	TTGCCTTGGG	AAGTCCCAT	GCCTTCCCTG	AAAACATTAA	240
ACATTCCTCC	GATCCCCAGC	CTGAGTCTCT	CTGTCTCTGG	GCCCCATCCT	GCTCCACAGC	300
AGGGCTGGTG	TGTCCAGCAC	AGAGTGACCC	TCCGATGCCC	TTTCCCACCC	GCCGCCCTGC	360
CTCCCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 515 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

GAATTCGGCC	TTCATGGCCT	AGGAAAGATC	TAATTATCAT	GGACCTGCGA	CAGTTTCTTA	60
TGTGCCTGTC	CCTGTGCACA	GCCTTTGCCT	TGAGCAAACC	CACAGAAAAG	AAGGACCGTG	120
TNCATCATGA	GCCTCAGCTC	AGTGACAAGG	TTCACAATGA	TGCTCAGAGT	TTTGATTATG	180
ACCATGATGC	CTTCTTGGGT	GCTGAAGAAG	CAAAGACCTT	TGATCAGCTG	ACACCAGAAG	240
AGAGCAAGGA	AAGGCTTGGA	AAGATTGTAA	GTAATAATAG	TGGCGACAAG	GACGGGTTTG	300
TCACTGTGGA	TGAGCTCAAA	GACTGGATTA	AATTTGCACA	AAAGCGCTGG	ATTTACGAGG	360
ATGTAGAGCG	ACAGTGGAAG	GGGCATGACC	TCAATGAGGA	CGGCCTCGTT	TCCTGGGAGG	420
AGTATAAAAA	TGCCACCTAC	GGCTACGTTT	TAGATGATCC	AGATCCTGAT	GATGGATTTA	480
ACTATAAACA	GATGATGGTT	AGAGACGTTT	TCGAG			515

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

```

GAATTCGGCC TTCATGGCCT AGGGGACCTG ACGTTCACTG TGGCCCCAAA GATGGCTGAG      60
CCAGAGAAGG CCCCAGCCCT CAGCATCCTG CTGTACGTGC AGGCCTTCCA GGTGGGCATG      120
CCACCCCTTG GGTGCTGCAG GGGCCCCCTG CGCCCCAAGA CACTCCTGCT CACCAGCTCC      180
GAGATCTTCC TCCTGGATGA GGA CTGTGTC CACTACCCAC TGCCCGAGTT TGCCAAAGAG      240
CCGCCGCAGA GAGACAGGTA CCGGCTGGAC GATGGCCGCC GCGTCCGGGA CCTGGACCGA      300
GTGCTCATGG GCTACCAGAC CTACCCGCAG GCCCTCACCC TCCTCTTCGA TGACGTGCAA      360
GGTCATGACC TCAAGCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

```

GAATTCGGCC TTCATGGCCT AGCTCCACTT TCTCTGAAAA TTTATTCATA TTGTTAATTA      60
AATTTGTTTT TATTATAGAA ATAATATATT GCATGATTG TAAAAATGCA GAGGAACAGA      120
ATGGCACAAA ATTATGTAAC CCTTCTATC TCCCCTGGT GTACCTCCTT AATCATACTT      180
CTCAGAACCA TTGTCAATAA TTTGCTGGGA GTTCTTCTGA TGGTTACCAT CGTGA CTGAT      240
AGATTTATTT CCCAGGTTC AGCGGTTCCC CTGCCTCAGC CTCCCGAGTA TCTGGGACTA      300
CAGGCATGCA CCACCACTCA GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

```

GAATTCGGCC TTCATGGCCT TGCCTTTTTT CTTTCACCAC TTTACTACAC ACAATTACTG      60
GATTAATCTC TTTAATGCCG AGATCTTTTT TCCTTAGTGA CACCTTAATC ACTCTTAGCT      120
TAACATATAT GGTCAATCCAT TACTGGGTTG CCTCTGCCTT TCCAGGATTG GCTGCCACTG      180
CTCCTCCACA TACCCTGTAT TCTAGCCAAA TGGAACTACT GCTGTGTCCC AAGCAGATTC      240
TTTATTTCTC TTGGCTGTTG CTCTCTATTT CTAATGCTAC CTGCCCTTCA AAACCTGAG      299

```

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

```

GAATTCGGCC TTCATGGCCT ACTTGATTG TGGCTTATCT CAAGTTACCA TTTTTCAGTC      60
AAGTCTGTTT GTTTGCTTCT TCAGAAATGT TTTTACAAT CTCAAGAAAA AATATGTCCC      120

```

```

AGAAATTGAG TTTACTGTG CTTGTATTG GACTCATTTG GGGATTGATG TTACTGCACT 180
ATACTTTTCA ACAACCAAGA CATCAAAGCA GTGTCAAGTT ACGTGAGCAA ATACTAGACT 240
TAAGCAAAAG ATATGTTAAA GCTCTAGCAG AGGAAAATAA GAACACAGTG GATGTCGAGA 300
ACGGTGCTTC TATGGCAGGA TATGCCGATC TGAAAAGAAC AATTGCTGTC CTTCTGGATG 360
ACATTTTGCA ACGATTGGTG AAGCTGGAGA ACAAAGTTGA CTATATTGTT GTGAATGGCT 420
CAGCAGCCAA CACCACCAAT GGTACTAGTG GGAATTGGT GCCAGTAACC ACAAATAAAA 480
GAACTAGTCT CGAG 494

```

(2) INFORMATION FOR SEQ ID NO:706:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

```

GAATTCGGCC CTTTCATGGCC TACTCCCAGG CTCTACTGAC TCCCAAAGA GCGCCCAAGA 60
AGAAAATGGC CATAAGTGGG GTCCCTGTGC TAGGATTTT CATCATAGCT GTGCTGATGA 120
GCGCTCAGGA ATCATGGGCT ATCAAAGAAG AACATGTGAT CATCCAGGCC GAGTTCTATC 180
TGAATCCTGA CCAATCAGGC GAGTTTATGT TTGACTTTGA TGGTGATGAG ATTTTCCATG 240
TGGATATGGC AAAGAAGGAG ACGGTCTGGC GGCTTGAAGA ATTTGGACGA TTTGCCAGCT 300
TTGAGGCTCA AGGTGCATTG GCCAACATAG CTGTGGACAA AGCCAACCTG GAAATCATGA 360
CAAAGCGCTC CAACTATACT CCGATCACCA ATGTACCTCC AGAGGTAAC GTGCTCACGA 420
ACAGCCCTGT GGAACGAGA GAGCCCAACG TCCTCATCTG TTTTCATGAC AAGTTCACCC 480
CACCCTCGA G 491

```

(2) INFORMATION FOR SEQ ID NO:707:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

```

GAATTCGGCC TTCATGGCCT ACCTTATCTT CTTAACCTTT CAAATACTTG CAGATATTTT 60
GCTTGGTGCT TCCCATCTAT TGCAATACCC CTTTAGATAA AGTCAATTCT TATCTAAAAT 120
CAAATTCATT TTATTGACA ATGTTTACAA ACAACCCAG GACGATAACA ATTACACTCT 180
CAATACTGGC ATCACACCTT CACAATTACA CTAACCCCAA CCTAGGCCAT GAAGGCCTCG 240
AG 242

```

(2) INFORMATION FOR SEQ ID NO:708:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

```

GAATTCGGCC TTCATGGCCT AGACAGAATT ACTGGGAACC ATTTTCCAAG TAGCCCCACCA      60
CAAAGGTTGT ATTTTGTCAA ATTGAAGGAG TCATCTGACT TTCCTTAATC ATAAGCTACA      120
AATATAATAA GCTACATTAA TAGATTTTCT AATATTTATT TAACTTTGAA TTTCTGGAAA      180
AAACCCAACT TGGTAATGAT TTATCATCTG AGCTTTGTTT TTGGCTTTGG TATGCTAATT      240
TTTGGCTTAG GATTTTATA TCTATTTTAT GAGTGGCACC TCGAG                        285

```

(2) INFORMATION FOR SEQ ID NO:709:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

```

GCACGCCATG GGAGAAAAAG AAGAAGCCAA AAAACAGAA GACAAGTCTT TGGCAAAGCC      60
TGAAACTGAT AAAGAACAGG ACAGTGAAAT GGAGAAGGGT GGAAGAGAAG ATATGGATAT      120
AAGTAAATCT GCAGAGGAGC CACAGGAAAA AGTTGACTTG ACTCTAGATT GGTAACTGA      180
AACCTCTGAA GAGGCAAAAG GAGGAGCAGC ACCAGAAGGA CCGAATGAAG CTGAGGTCAC      240
TTCTGGGAAG CCAGAACAGG AAGTACCAGA TGCTGAGGAA GAAAAATCAG TTTCTGGAAC      300
TGATGTCCAA GATCTCGAG                        319

```

(2) INFORMATION FOR SEQ ID NO:710:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

```

GAATTCGGCC TTCATGGCCT AGACACATAC AAAGATAAGG CTTTGATAAA ATTCAAGAGT      60
TATTTGTATT TTGAGGAAAA AGACTTTGTG GATAAAGCAG AGAAGAGCCT GAAGCAGACT      120
CCCCATAGTG AGATAATATT TTATAAAAT GGTGTCAATC AAGGTGTGGC TTACAAAGAC      180
ATTTCTCGAG                        190

```

(2) INFORMATION FOR SEQ ID NO:711:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

```

GGATTGAATT CTAGACCTGC CTCGAGTAAG ACCCCTTTTT AAAATGACTC CCACTGTCTA      60
TTCCACAGCC GGTGTGCGGC ATGCTGATTC AATCCCCACA ACAGCCCAGG AGGTAGGCGC      120
CGTCCCATCC TCCTTTACAG GAGGGGAAAC TGAGGTTTCA GTGGTCAGAT GGTGAGCTGC      180
CTCCAAGACC ACGCTCGAG                        199

```

(2) INFORMATION FOR SEQ ID NO:712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

```

GAATTCGGCC TTCATGGCCT ACCTGTACCT GTTTTATACT TGCTTTTGCT TCAGCGTTCT      60
GTGGTTGTCA ACAGATGCCA GTGAGAGCAG GTGCCAGCAG GGAAGACAC AATTGGAGT      120
TGGCCTGAGA TCTGGGGGAG AAAATCACCT CTGGCTTCTT GAAGGAACCC CCTCTCTCCA      180
GTCATGTTGG GCTGCCTGCT GCCAGGACTC TGCCTGCCAT GTCTTTTGCT GGCTAGAAGG      240
GATGTGCATT CAGGCAGACT GCAGCAGGCC CCAGAGCTGC CGGGCTTTTA GAACACTCCT      300
CGAG                                          304

```

(2) INFORMATION FOR SEQ ID NO:713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

```

GAATTCGCCC TTCATGGCCT ACCCAATTCA GTTCCAGAG GAGGTGGAAC CTTCTGCAAC      60
CCAACAGGAG GCCCAATTG AGCCTCCAGT TTCTCCTATG GAGCATGAAC TTTCATCAG      120
TGAGCAGCAG CAGCCAGTTC AGCCTTCTGA GTCTTCTAGG GAGGTGGAAT CTTCTCTGAC      180
CCAGCAGGAG ACCCCAGGTC AGCCTCCAGA ACATCATGAA GTCACAGTTT CACCTCCAGG      240
TCACCATCAA ACTCATCATT TAGATTCACC CAGTGTCTCT GTGAAGCCTC CAGACGTGCA      300
GCTCACCATA GCAGCAGAGC CTAGTGCAGA GGTGGGAACT TCTCTAGTCC GACCCCTCGA      360
G                                          361

```

(2) INFORMATION FOR SEQ ID NO:714:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```

GAATTCGGCC TTCATGGCCT ACCGAGATGG AAATAACCTA AGAAAAAGAG GGCATCCAGC      60
TCCATCTCCC ATTTGGCGTC ATGCTGCTCT GGGTCTGGTA ACTCTTTGCC TGATGTTGCT      120
GATTGGGCTG GTGACGTTGG GGATGATGTT TTTGCAGATA TCTAATGACA TTAACCTAGA      180
TTCAGAGAAA TTGAGTCAAC TTCAGAAAAC CATCCAACAG CAGCAGGATA ACTTATCCCA      240
GCAACTGGGC AACTCCAACA ACTTGTCAT GGAGGAGGAA TTTCTCAAGT CACAGATCTC      300
CAGTCTTAAC CTCGAG                                          316

```

(2) INFORMATION FOR SEQ ID NO:715:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```

GAATTCGGCC TTCATGGCCT AGGCAATATC AAGGTTTTAA ATCTCGGAGA AATGGCTTTC      60
GTTTGCTTGG CTATCGGATG CTTATATAAC TTTCTGATAA GCACAACATT TGGCTGTACT      120
TCATCTTCAG ACACCGAGAT AAAAGTTAAC CCTCCTCAGG ATTTTGAGAT AGTGGATCCC      180
GGATACTTAG GTTATCTCTA TTGCAATGG CAACCCCCAC TGTCTCTGGA TCATTTTAAG      240
GAATGCACAG TGAATATGA ACTAAAATAC CGAAACATTG GTAGTGAAAC ATGGAAGACC      300
ATCATTACTA AGAATCTACA TTACAAAGAT GGGTTTGATC TTAACAAGGG CATTGAAGCG      360
AAGATACACA CGCTTTTACC ATGGCAATGC ACAAATGGAT CAGAAGTTCA AAGTTCCTGG      420
GCAGAAACTA CTTATTGGAT ATCACCACAT CTCGAG                                456

```

(2) INFORMATION FOR SEQ ID NO:716:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```

GAATTCGGCC TTCATGGCCT AGATCATTCA GTGGCTCACC TAATATCACA GAACAAGTGG      60
TGGAGTCAGA ATCTTTTATC TAAAGGAGAT ATTTTCATCC TTAGATTAAT GTCCTCTTCA      120
CAGTCTCATG CTACTTTCCT TTAAATGAA ATTGCTGTTC TTTTTTAAAT TGATTTGGCC      180
AACTTCATTT GTAACGGAAG AATCAAATTT AGAGCCCGGG TCTCATCCTA CGGTATCTCG      240
TCCTGAACCT CTGGTCTCCC TCAAGAATGA CTCAGAAGGA CGGACTCGAG                    290

```

(2) INFORMATION FOR SEQ ID NO:717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

```

GAATTCGGCC TTCATGGCCT AAAAAAAAAA GCCTTTTAAA CTGTAGGAA TTAAGAAATA      60
AGAATAACCT ACAAATGCT AGCAAAATTT ATCTCATTTT TTTTCATTGT ATTTTCAGGT      120
TTAACTGAAC TGAATGACAG TCCAGTTCCC CTAGAACTTG AGCGCTGCAA GTCTCCTACC      180
TCAGACCATG TAAATGGACA CTGCACAAGT CCAACTTCTC AGAGTTGCAG TTCTGGAAAA      240
CGTCTTTCTA GTGCCGATGT TTCAAAGTA AATCGCTGGG GTCCTGGAAG ACCACCAGTT      300
CTCGAG                                306

```

(2) INFORMATION FOR SEQ ID NO:718:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 294 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

```
GAATTCGGCC TTCATGGCCT AATATTTTATT AAATGACTTG GTAGATAGAG CAACTGACTG      60
AATATATTAT TTTT TAGGAA GAAGAAGAAC ATTTTGCTT AAATTAAATT TCTTATTTTA      120
TTTCTCTTTC CCCTTTTATC CAGGGTAGGT CCAGGTAAAG CCAAAGGCCT TATCCTTATC      180
TACACTGCTG GGGGACACAA CACAAGAATT TCAAGTTCAA GTATTATTTT TCATTTTGAG      240
TAATTTTGTG CTCATTTTGT TCCAGTTCTC ACTCTCAGAA AAAGATTACT CGAG              294
```

(2) INFORMATION FOR SEQ ID NO:719:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

```
GAAACAATAG AAACACTGAG AGAAAATTCA GAGAGACAGA TTAAGATACT GGAACAGGAA      60
AATGAACATC TGAATCAAAC AGTGTCTTCC TTAAGGCAGC GGTCCCAGAT AAGTGCAGAA      120
GCAAGAGTGA AAGACATTGA AAAAGAAAAC AAAATTCTTC ATGAATCTAT CAAAGAAACA      180
AGTAGCAAGC TAAGCAAGAT TGAATTTGAA AAAAGACAAA TTAAAAAAGA ATTGGAACAT      240
TATAAAGAAA AAGGAAGCTC GAG              263
```

(2) INFORMATION FOR SEQ ID NO:720:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 320 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

```
GAATTCGGCC TTCATGGCCT ACCTGCCCTT CTGCGGTCAC AGCTGCCTGC TGGGTGGGAG      60
TCCGGGGGAA TGGTATGTGT GGTCAACAGA GGGCACTGAG TGGGCTTCAG TGGCATGTGA      120
ATCCTGGCAG AGTCTCGGAT CCCCAGTGGG GAGAGGAGAA AGCACAAGCC AAGACAACGA      180
GTGGGGGAAG GAGGCAGGGG CTAAGTGACG GGTGGGGGGT GGGGGTGGGA ACTCCAGTGT      240
ACACATTGAC AGTCTCTATG TTGGCTTCAC CAGCGCTTCT CTGTTTGTCT CGTCCCTGGA      300
TTTCTAACAG TTGCCTCGAG              320
```

(2) INFORMATION FOR SEQ ID NO:721:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

GAATTCGGCC	TTCATGGCCT	AGTCGGGAGT	GTCTTAAGCT	TTTCATTAA	CCTAAAGTAC	60
AGAGTCTGCT	CTGTAGAAAT	ATGTCATTAA	GAAAATATT	GAGTCCCAGC	TCCTCCTTGT	120
TGTGTAATGT	CTGATAATTT	CACTCATTAA	ATTACCCAGA	CAGACCATAA	AGTCCTCTCA	180
GTTTGTCATCA	CCTGAAAGTC	AGTCAGCCTG	GGCTGTGAGG	ATTGTGAGGT	AGAACTCACT	240
GTGGAAGGAC	GGCATTAGGG	AAGACTTTAG	GAAAATGGAG	CGGAACCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:722:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

CTCGAGACCT	GTGTGCGCAG	GCAACGGGGA	AACTGGAAAT	GGCTTGACAA	ACTGACGCAA	60
AACTGGGCCC	AACAGCCACA	AGGCACTGGT	CCTTTTCCAC	TGGGCAAAGT	TCAGTCGCAT	120
TTCTTTCTGT	TCTCTTTCTT	TCTTTCTTTT	CTTTTCTCTC	TTTCTTTCTT	TCTTTCTTTC	180
TTTCTTTTTT	CTTTCTCTCT	CTCTTCTGT	CTGCTCTCTG	CTTTCTTTCC	TTCTTTCTCT	240
CCTTCCTTCT	TTCTTTCTTT	CCTTTCTTTT	CTTTCTTTTT	TTTTTCTTTT	AAGAGACGGA	300
GTCTCGCTCT	GTTACCCAGG	CCGGAGTGCA	ATGGCACAAAT	CTCGGCTCAC	TAGGCCATGA	360
AGGCCGAATT	C					371

(2) INFORMATION FOR SEQ ID NO:723:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

GAATTCGGCC	TTCATGGCCT	AGTTCCTTGG	TGGTTTGAAA	GTTAGAGAGA	TCCTGATAAG	60
CATAATGACC	AACATAGAAG	AGATTAAGTA	CCTTTACTCA	TAAATGTGAG	TTACAGACT	120
TCAGGTCTAA	ATTCGTAACA	ATATTTAAGA	TGTATATGGC	TTAAAGTGCT	GGTAGTTTGT	180
ATTAGAATCC	ATAGGTTTCT	AGTCACTGCT	CTTTTCATTA	TTTGAGTTTT	TATGTATTTT	240
TTAACTAGAA	ATAAGAGGGT	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:724:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

GAATTCGGCT	TCATGGCCTA	GAAAGTTTTT	CAAAAATTCT	TCAATTGTCT	CTGTTGATG	60
CAACTTAATT	TTTTGCTGAG	AGAGACCTTA	AATGTAATTA	GTATTGTATA	ATTAGCCTGA	120
TTAATCTGAC	CTGTACATCA	CGAGTCACTT	GTCTTTAGCC	CAAGAGGAAT	GCTTCCTTTC	180
TGATTTGAGG	CAGTGGCCCA	TCATTGCTTC	TAGCAACCTT	CCTACTTACT	AGATGACCTT	240
GAGTCAAGGT	TTCTGTATAT	ATGATTTTCAG	ATTGTGCCCC	TAGAACTGAA	AAAGGGTAGG	300
AGAGGCAAAG	ATAGGAAAAA	TATTTTAA	AAATTTTAA	GTATTTTATT	TTTATTGGGA	360
AAATATTTAT	TGTAAGTCTT	CCATTGTGTA	TCCTTCTGCC	ACTAGCATT	CGTAAAAAGT	420
AAAAAGAGCT	TTACATCAAA	AAGCACAATG	AACTTTGTA	TCCTTAAGTC	CGTACTCGAG	480

(2) INFORMATION FOR SEQ ID NO:725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

GAATTCGGCC	TTCATGGCCT	AGTCGGAGGT	GTAGGAGGGG	CCGTGGAGGT	CCAGGTGACT	60
GCTTAGAAAA	CTGCACAGCA	TCTGATGAAA	TTAGCGAATA	AGAACATCAA	CCATGTCTTA	120
CACTCCAGGA	GTTGGTGGTG	ACCCCGCCCA	GTTGGCCAG	AGGATCTCTT	CTAACATCCA	180
GAAGATCACA	CAGTGTCTG	TGGAAATACA	AAGAACTCTG	AATCAACTTG	GAACACCTCA	240
AGATTCACCT	GAATTGAGGC	AACAGTTGCA	ACAGAAGCAG	CAGTATACTA	ACCAGCTTGC	300
CAAAGAAACA	GATAAGTACA	TTAAGAGTT	TGGATCTCTG	CCCACCACCC	CCAGTGAACA	360
GCGTCAAAG	AAAATACAGA	AGGATCGCTT	AGTGCAGAG	TTCACAACAT	CACTGACAAA	420
CTTCCGCAAG	GACTCGAG					438

(2) INFORMATION FOR SEQ ID NO:726:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

GAATTCGGCC	TTCATGGCCT	AGCTACCTAT	CTACAAAAAC	TCCTGGATCC	TTTATTACGA	60
ATTGTGATCA	CATCCTCTGA	TTGGCAACAT	GTTAGCTTTG	AAGTGGATCC	TACCAGGTTT	120
GTCATCTTTT	CACATAGAAC	CGCTGTTTTT	TGTTTTTTTT	TTTTGTTTGT	TTGTTTTACT	180
AACACTGCAT	GAAGCAAGGC	ACCTTCTCCC	CTTGATCATT	AAAATTAGTT	TTTAATTATA	240
AAAGTTATAT	ACAAATACAC	GTTTCTTTAA	TGATATCTGT	AATTTTTTTT	TAAGGTATCC	300
TTTTATTTGC	CTTAGATCCA	GGGACAAACT	AGAGAAAGGT	GTCTTTGACT	TCCACCTCCA	360
GAGACTGTTA	CTAGTTAAGT	CTGTTCCCCT	GTCCTTTTTT	CATGCACCGC	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

GAATTCGGCC	TTCATGGCCT	AAGGAGGTCC	ATGAGGAAGT	GTCCCAGCCT	GTCAGTGCAT	60
CTCATGAGTT	CGCTGAGTGA	TCAGCAGACA	GTTCCAGGAA	GTGAACAAGT	CCAAGAGGAC	120
TTCTGATTAG	TCCACAGTCT	CCTCTATAGG	CTCAGTAGAT	GAAGGCGTTT	CTGAGGGGCTT	180
GCCTACACTT	CAAAGCACGT	CTAGCACTAA	TGCTCCTCCG	GATGATGATG	ATCGATTGGA	240
AAATGTTTCTAG	TATCCCTACC	AACTCTACAT	TGCTCCTTCC	ACCAGCAGTA	CAGAGCGACC	300
AAGTCCAAAT	GGTCCCGACA	GACCTTTTCA	GTGTCCAACC	TGCGGGGTGC	GATTACCCCG	360
TATTCAGAAC	CTAAAGCAGC	ACATGCTCAT	CCACTCAGGA	ATTAAACCAT	TTCAGTGTGA	420
CCGCTGTGGG	TCTCGAG					437

(2) INFORMATION FOR SEQ ID NO:728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

GAATTCGGCC	TTCATGGCCT	AGATCACTGC	CCTTTCAATA	ACACTCTTGC	CTCTAGAATC	60
ATATGTTCAA	AGTATGAATA	CACACCTAGC	ACATAGTAGG	TGCTCAAATA	TTAATTTCTT	120
CCTTGCCTTC	CTTATCTACC	CTGTGTCCTC	CATTTCCCGG	TATGATTCCA	ACCCAATATA	180
GCAAATGACA	TTTACATGTT	ATGAAAACAT	CTATTGGGTA	AAATCAGATC	TTGGATAAAG	240
AAATTCTGAC	TTTTATATAA	GCTTTGGTA	GACAGAAAAA	ACAGAAAGGT	ATTCGTTGGT	300
AGAACATTTT	TAAGTTCAGG	AAAGAAAGCT	GGAATAATAC	TACGTAACCT	TGTCCAGGTT	360
ACTTTGACTG	AAACACGTTT	TTGGTGGATT	TCTTTTCCTC	AAAGAACTCT	CTAAATGCAA	420
CTCCTTGCTG	GATTCTCTAC	CCGATCTCGA	G			451

(2) INFORMATION FOR SEQ ID NO:729:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

GAATTCAACC	ATTAAAGATA	ATTTATATTA	GTGTTTCTAT	AACTTCTAAA	ACATCTTTTG	60
ATAAGGATAA	TAATCTCATT	GTCATTCTGT	ACTGATATTT	GGATATAATC	CTAGCAGGGC	120
ATAGCTCTGA	TTAAGAACAA	TTGAACCATT	CAATTTTFTA	TTAGCCTCTA	TTTTCACTAG	180
CCAGGATATT	TTCATGAAAC	TTTTTAGTTT	CAAAGCAAGT	TTTTTCTTTC	CAATAGAAAG	240
TGTTATATTA	GTAACAATTT	TTGTCTTCTG	CCAAGACCAG	CTCAGTCGGG	AAGATCCTAA	300
CCCAGTGGCA	AAACTCGAG					319

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

```
GAATTCGGCC TTCATGGCCT AGGGAAGAAT AAAGAACAAA ACCCAAACT TTGGACCTTA    60
AAAAACCCAG GCTGGCATT TAGTAGCAAT TGGGTGTGTT CGGTTTGGAA TATATTGTA    120
TATACATGCC TCCATGTGCT TTGGCCTTCT GGTATCTTCA CCAGATGCTG CCTTTTTTTT    180
TTTTTTTAAAC AAGTTCCTGT TCACTTTTC CAGCTAGCTG CTGGGTATCT CCAACAAAAT    240
ATCTCATAGA TCTCCCACT GTAATGTATT CAAGCCAAA ATCAGCTCTG CCCATTCTCC    300
ATCCCAAAGC CCCTCCTCTT GGTACCAGA CAACCTTAAC CAAACCACTC GAG          353
```

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

```
GAATTCGGCC TTCATGGCCT AGAGGAGGAA GGCCTTCGTA AAGGTTGCAT CTCCGTCCCT    60
TCGCTCCCGG GGACCCGCGG GAAAAAATAA AATCCAACAC CCAGGCCCG CGGCTAGCCC    120
CTTCCCACAG GCTCTCTCCG CTCGATTTTG TCACCGTTAT GTGGGAAGCG AATCCATGTA    180
TTTGCATGCC CGAGTCTTTG AGCCGTGCTA TACCAAGTTG TCCAGATTGT TTATACTAGC    240
AATGCAGTTT ACGGTGAAGA CCTGCCTTCC CTCTGGGAAT CTGGAGCTTC AGTAACAGGA    300
GATGTTTCAC AAAGCAGAAG AATTATTTTC TAAAAACAAC AACATGAAG TGGATGACAT    360
GGACACGTCA GATACCCAGC TCGAG          385
```

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```
GAATTCGGCC TTCATGGCCT ACTCCGTCTC CAAAAAATAA AAAAAATAGT GTTCAGCAAG    60
GTTGAAGCAT AAAAGGTTAA TAGCCAGAAT CATTATCAA TTGTATTCT ATACATCTAC    120
AAGACACAAT CTGAAAATGA AATTAGAGAA ACAATTTTAC TGGGCAACAA GAGCAAACT    180
TCATCTCAA ATAATAATA TAATAATAAT AATCATCATC ATCATCATCA TCTACAATGT    240
CATTTCAT CCAAGTCTCG AG          262
```

(2) INFORMATION FOR SEQ ID NO:733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGCTCCTG	GCCTCGGGCA	CTCTACCCGC	60
TTCAGCCTCC	CAAAGTGCTG	CGACTGATTA	CAAGTATGAG	CCACTACGCC	TGACCATAAC	120
ATGTAAAATT	ATGGCAAATG	GTAATTCACA	GCTCAATTCT	AAAATGTGAT	GAAATTAAAA	180
TCAGAAAGGC	CAAATGAGTC	ACTTTTCTT	AACACTAAGA	ATTATAAACC	TTTAAATTC	240
TTTTGTACTG	TAATTTTTTA	TGTGACATGT	ATATGCTTTT	TAATATGTGT	GATAGGATGA	300
GGGGCAGGAG	AGGGGGCTCT	AGACATGAGG	GTGCCTGGGG	CCTCTGTAGA	CCTTCAGATG	360
GCCCTGGGTG	TTATAGCAAG	AGCTGGTCTA	CATCTAATAC	TACTGCAGGT	GCTGTCAATG	420
ATTCTTTGTA	TAATTCCTTG	TATATTAAAT	GACATTATTC	TATGTATAAT	GTCATTTAAT	480
ACTTATAACC	TACTTTCCTC	GAG				503

(2) INFORMATION FOR SEQ ID NO:734:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

GAATTCGGCC	TTCATGGCNT	AATGGATTCA	TTTTTTTTCA	GCAGCATGGC	ATAGTGGATT	60
ATGAAATCAA	AATTAACAC	ATGTGGAGTC	NTACATTGAA	ATCCCCCTTC	AACAAAATAG	120
TATACTATGA	GTATTTTTAA	ATTATTTAAC	CCCTCCGAAC	ACCAATTTGT	ACACGAATAA	180
AACTTGACAC	AACAGGATTT	TGTGGGGCGT	GAGTAACACA	ACATATACAA	AAGCACCTTA	240
TAAAGTGTTT	TATATAGCAA	CTTCTCTCTC	AGTTTGAACG	GGTCTCAGGA	TAAATTAGCA	300
AATATGAATT	CTAACCTTTG	TACTTACATT	TTAATTCTGC	TAAGTGTGTG	AACCCCAATT	360
TAGCAATTAA	AATATTTATT	TCCAGAATGT	TTTGACCCTG	AGCATATTTT	TAAAAAGCAC	420
AGTAGCTCGA	G					431

(2) INFORMATION FOR SEQ ID NO:735:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

AAAAGTGACT	GAAAGTTTGC	TAGTGTTTTT	AGTACCGATA	TTTACTGGTA	GTAAATATAT	60
ACTAAATCCA	GTGAAATATG	ACTTCTCTAA	CTGAGCTTGA	CATATCCTGG	TTATATCTCA	120
TGGCAGCTGA	AACTAGAAA	TGACTTATTT	TTACCTTGTA	GCCACAGCAC	ACTTGAGGTT	180
ATTCTTAGGT	TTTGTTAGA	GACAAAGCTG	GTTAGTGACT	CCTGGATTAA	GAATTATGAG	240
TGATCCCAT	ACCCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:736:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

```

GAATTCGGCC TTCATGGCCT AAAGGATATT GGCATGTTCC TCTTCTCATC AATATCCTAA      60
AAGACATTTA TTTTACAC ACTCCTTGGG AAAAATTAAC TTTTTCAC TGAAAATATT      120
TCCTTTTTTG GTTATCTTGA TCTCAGATTA TTTGTGAAA GAATTTTACT GTACTTAGTT      180
CAAAAGAGTA GAAAGAATGA TTTACTATTG CAGACATATG TAGGGTAAAA TCATAATTTA      240
TTTAACTGA CTGTACAACA CCATTTAGAG TTGATATTGA CATAAATGTT ATTAGCCTAC      300
TAATTTGGAA CTGCATTTCT CAACAATGCT GGCAAGCATC TTCCGTACTT AGCATACCAA      360
GTTGTAGGGG AGAGACTGTG TATATATTTT TAAAGCAA TCCAATGGAT TTGTTTTTGT      420
TCATATTTTG GAAACAACTC GAG                                         443

```

(2) INFORMATION FOR SEQ ID NO:737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

```

GAATTCGGCT TCATGGCCTA CAAAAGATGG CCCTAAGCCT GGCCTCTAGC TTCACTCGT      60
GGTGAATATT TCAGACCTAA AGATCCAGAT AGTATCTCTG TTCATATGTG AATAAGTTGA      120
AGATTGTGGG GCTACTTTTT CTCATAGCAC TTTATTTTGA ATGTTGTTAG TTTGTGCTGA      180
GAATGGTCGT CCGTATTGA ACCAATTATT TATTTTAAAA TATATTTAAG CTACATTTTT      240
GTTTTGAAAA ATTGCCATAA ATTTGGTGCC ACTTTCTTTT ATTTATTTGA CTGAGTTAAT      300
ATTATTGTAT TAACATTTTA AGTATATGGT GTTTACATTC TTATTCTTTT TGACATTTTG      360
GAAATAATCA TAACCTGTCT TTCCAAAATA ACCATTTTCT TGATGGAAGT CTCCTAGAG      420
TTTTTACCAA ATAGCTAACT TTAGTAGTAA AACCTCATG TGTATCCATT CCCCCACTCG      480
AG                                         482

```

(2) INFORMATION FOR SEQ ID NO:738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

```

GAATTCGGCC TTCATGGCCT AGATTGTCAG TTTATCTTAG ATGATGAGGA AGCAGTACCA      60
AGAAAACACT TGGGGGTTGA TACAACAGGC ACATGAGCCC TAAAACCTCC TTCCTGTTTT      120
TTTTCTTTTT TTTTCTCTT AGGTAGATTA GTGCATTTAA AGCCTGAAGT TAATTTGACC      180
TAAAATTTTT ATAAGTCTTT GCAGAAAGTT CACTTGTTTC CTGAAATCAT CTCCTTGATA      240
ATTTTTTATG TAACAGTTGT TCATATTGTA GGAATGATAT ATATGTCATC CTGTTACACG      300
TGTCAGGCAC TTCAAAAAGA CTCCAAGAGA ACATGCCTGA GAAAGATAAC TCCCAATTAA      360
AAATGATTCA GTCCTCACT TGCAATATTC AGGATAAATG TGTGGAAACA TTAGGCTACC      420
AGATAAATAA AAGGTAGTTA TTTCTAGGG TGA CTGCA GATATTTCT CGAG                                         474

```

(2) INFORMATION FOR SEQ ID NO:739:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

```
GAATTCGGCC TTCATGGCCT AGCCTTTGAG ATCAATACCT GTGAAAAGTA GGGAAAGAAA    60
GCAGATGAGG CATAGGGAAA AGGTGGACTG CCACAGGCAA CCCAGCGAAC CTCACCAGCA    120
GCTCTGGAGC TAAAATAGCT CTTCAGAATT GTCCAGAGTT GGGCTGAGGA GGCCAGAATT    180
TTATTGTGT TCCCACGATG ACGACTTCGA G                                211
```

(2) INFORMATION FOR SEQ ID NO:740:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

```
GAATTCGGCC TTCATGGCCT AAATACCTTA ATGGTGGTAG AGCCTTTACC TGTAGCTTGA    60
AAGGGGAAAG ATTGGAGGTA AGAGAGAAAA TGAAAGAACA CCTCTGGGTC CTTCTGTCCA    120
GTTTTTCAGCA CTAGTCTTAC TCAGCTATCC ATTATAGTTT TGCCCTTAAG AAGTCATGAT    180
TAACTTATGA AAAAATTATT TGGGGACAGG AGTGTGATAC CTTCTTGGT TTTTTTTTGC    240
AGCCCTCAAA TCCTATCTTC CTGCCCCACA ATGTGAGCAG CTACCCCTGA TACTCCTTTT    300
CTTTAATGAT TTAACATCA ACTTGATAAA TAACTTATAG GTGATAGTGA TAATTCCTGA    360
TTCCAAGAAT GCTCGAG                                377
```

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

```
GAATTCGGCC TTCATGGCCT AAGGCGTTTG GGGTTTCCTA GTTGTGCTGC TGCTCTTGCC    60
TAGGGAATCT GCTCTTGCTT TGGCCTCTTT CTTGGGGCA AGAGTGAGGG GGACAGGGAG    120
CTTCAAGTCA GCCCTCCATG TTGAAGTTTG GTAGAAGCTC TGCCACACC TTGGACTGGA    180
ACCCAGCCAT GCCAATCCCC ATGATCACCA ATCCGAACCC CTTGAAGTAG AATTTTCATA    240
CCCTACTGAC TAACCACCTT CTTAGCCAGG CCATAGCCAT TCAGCAGTGC CTCCTTCCTC    300
TGGGTAGACA AACAGCCTTG AACAGAAAGG TGAACACTC GAG                                343
```

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

GAATTCGGCC	TTCTGGCCTA	GAGTCCTTGT	TGTCCTTTGC	AAAGGTTGCT	CATCACCTCT	60
CCCCTCCCTC	TGGCTCTTTT	CCGTGGTGAT	GCATAGTTCA	ATGCGCCCAG	GAAGCTTCAT	120
GATGAGGCCG	TCACCCAAAC	TAGCAGCCCT	CCTTTCCTTC	TTTCTTTGCC	AAGTGTCCCTG	180
GACATCAGCT	CTTCCTCAGT	CTTTGACTCT	AAATAAAGAA	CTTGAATTTC	ACCATTCAAC	240
TGAAATCCCT	CTAACCTCG					259

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

GAATTCGGCC	TTCATGGCCT	ACACCGTCGC	CATTGCCAGA	AAGAGCGATT	TATGGCTTTG	60
TTCTTTTCTT	AAGCTCCCAA	TTTGGCTTCA	TACTTTACCT	CGTGTGGGCC	TTTATTCCTG	120
AATCTTGGCT	AAACTCTTTA	GGTTTAACCT	ATTGGCCTCA	AAAATATTGG	GCAGTTGCAT	180
TACCTGTCTA	CCTCCTTATT	GCTATAGTAA	TTGGCTACGT	GCTCTTGTTT	GGGATTAACA	240
TGATGAGTAC	CTCTCCACTC	GACTCCATCC	ATACAATCAC	AGATAACTAT	GCAAAAAATC	300
AACAGCAGAA	GAAATACCAA	GAGGAGGCCA	TTCCAGCCTT	AAGAGATATT	TCTATTAGTG	360
AAGTAAACCA	AATGTTCTTT	CTTGACGCCA	AAGAACTTTA	CACCAAAAAC	TGAACTGTGT	420
GTAACCATAG	TAACACCAAG	CACACTCGAG				450

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

GAATTCGGCC	TTCATGGCCT	AAATCTTCAG	GGTCTTAACT	TAGTTTTTGA	TCCCTAAAT	60
TAGTGCTGCA	TATGTAGACT	CAGAAACCTC	ACGTAAAAAT	TTAAATTGGC	CTCAGGTTGG	120
CAATGTTCCA	AGGCAATGGT	TAGAAGCAAA	TTCAGATTCT	CCAAGGCCTC	AAATAATTCC	180
TACAGATAAA	ATCCCAAGGA	AATTCAGCAG	TGCCTAGTCA	AAAATCCACA	AATCAGGCTC	240
GAG						243

(2) INFORMATION FOR SEQ ID NO:745:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

```
AAGCGAGGCC CTGGGGGACA ACGTGAAACA ATACTGGGCT AACCTAAAGC TGTGGTTCAA      60
GCAGAAGATC AGCAAAGAGG AGTTTGACCT TGAAGCTCAT AGACTTCTCA CACAGGATAA      120
TGTCCATTCT CACAATGATT TCCTCCTGGC CATTCTCAGC CGTTGTCAGA TTTTGGTTTC      180
TACACCAGAT GGTGCTGGAT CTTTGCCTTG GCCAGGGGGT TCCGCAGCTT CTCGAG      236
```

(2) INFORMATION FOR SEQ ID NO:746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

```
GAATTCTAGA CCTGCCTCGA GCCTGCAGAC ATCTCCTCCT TCTTGTGGT TCTGGGAGCC      60
ATTCTGTGCC TCTAAGGTCC TCTTCTTTT TTCTACCAA TACACATATT TTCTGTCCTT      120
CGCAATTCTA TTAAACCTCA CATTGATGG TTGTTTCTT AAAATTCCTT TACTTGGTTC      180
CTGCATTCTT CATTCTTCC CAGCACAATC TCGAG      215
```

(2) INFORMATION FOR SEQ ID NO:747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

```
GAATTCGGCC TTCATGGCCT AGAAGAAAAC CCATCAGATA TTATAATAAG ACAATAACTC      60
AATTTTCAGAC TTGTAAACAA AGGTGACATT AATCTATGTA AATGTGGGAA AATAGTCAAC      120
CTGTATCCTT CTCATACCAT AAATCAGCAT GTTTGATCAC TGGAAGCTTC ATTTTGATGA      180
TTAGCAGTCA TGTATTGAGG CTAAATGATA TGTTTGTGCG ACAGCATCTC GAG      233
```

(2) INFORMATION FOR SEQ ID NO:748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

```
GAATTCGCCT TCATGGCCTA CACAGGAGAA AAACCCTATG AATGTAGTGA ATGTGGGAAA      60
ACTTTTGTTT AGAAGTCCAC CCTCAGAGAT CATCACAGAA TTCACACAGG GGAGAAATCC      120
TTTCAATGCA ATCAATGTGG AAAAACATTT GGCCAGAAGT CAAACCTCAG AATACATCAG      180
```

AGAACTCACA CTGGGGAGAA AACTTACCAG TGTAATGAAT GTGAAAAATC CTTCTGGCGA 240
AAAGATCATC TCATTCAACA TCAACTCGAG 270

(2) INFORMATION FOR SEQ ID NO:749:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

GAATTCTAGT TTAATTACAT ATACCTCTCT GTTGGCTTAG TAGTAATAAA AATATTTTCT 60
GTAGGTGTAG AATATCCTTA CAGTCCAAAA GGAGAGTACA TGTTCAACAAT TAAAGTTTGA 120
AATTTGTGCT TTGATAACAG CATGTTTAT TCATTCATTT TTATAATAAT ATTACTGAGC 180
CTGTATCATA TAGTGATGAA CTTTTCAGCT GTTTTGAGGG TTTGTGTTAG CCACATTCAC 240
ATTTGTATAA CCTGTGTTTC TTTTATTATTT TTCTTTATTT TCATTTTAGA TTCAGGGGGT 300
CGGCTCGAG 309

(2) INFORMATION FOR SEQ ID NO:750:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

GAATTCGGCC TTCATGGCCT AAGCTCTTTT AGTGAAGGAT TGTTTAAAT AAGAGCTCTC 60
AGTTCAAGAC AACTACTGTT AGGAGCTTAA ATCGGAACCA CAATCAGCAT ATAAAGGTCC 120
TAATCCTGAC CTTAATCCCT TTGGAATATT GGTTTTATAA ATCATCAATC AACAGTGTTC 180
CACTATGAAA GCATATTCTG TCTTCTTCTT TTCATGTATT CCTTCACTGC TGGTGCTTAA 240
TGTCTTTCTT TCCTCTTCTG CCATTTCTCT TTCCATGAAT TATAATTGCC TTTTGAATTC 300
AGAAATTAAA ACCACTCCAC AGCTCGAG 328

(2) INFORMATION FOR SEQ ID NO:751:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GAATTCGGCC TTCATGGCCT AATAAGGAAG AAATTGTCTC ACTTTATTGA ATAGTTGATT 60
TAAATTTTCT GGTATTTAGA GGTAATATAG TATAAGTTTT TTGTATATT ATCTAAGATT 120
TTCCTTTTGA AAATTTTCTT CCCTTTTCAT ATTATTTTCA TTAAACGATT TTCCTTTAAA 180
ATTTGTTACT AACAAAGAACT ATCTAATATG CAATGAGATT TTTGCAGGGC ATTCTCGAG 239

(2) INFORMATION FOR SEQ ID NO:752:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

```
GAATTCGGCC TTCATGGCCT AAGGAAAGTA CTTTAGACAA AAAAAAAAAA AAAAGTGAAA    60
TTAATTCCTG GGGCAATGAA AGGAAATGTC ATTGGCAGTT TTACCTTTAT TCTGCTAATG    120
GCTATTGTGT GTCTGTTTAC CTGGAGGCAC TTGGAACTTG TGGCACAGAA TGCTGTATGT    180
ACAGGATATC ATCTACATGG GAATAATTGT TGTAACACC CCAAACCTCGA G              231
```

(2) INFORMATION FOR SEQ ID NO:753:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

```
GAATTCGGCC TTCATGGCCT ACAATAGAGC TCTTAACTT ATTAACTGA AATTTTGTAT    60
CTTTTCACCA ACATTCCCC AACTCCCCTT TACCCCAACT ACTCCAGCCA CTGATAACCA    120
CCATTCTGTT CTCTATTCT TTTTCTTTT TTTTTTTTT TTTTAAAGAG ATGGCGTCTT    180
GCTGTGTCGC CCAGGCTGAA GGGCAGTGGC ATGATCTCGG CTTACTGCAA CCTCTGCCTC    240
CCCGGTTTAA GCAATTCTCT ACCTCAGCCT CCCGAGTAGC TGGGATTACA AGCACCCATC    300
CACTCGAG                                308
```

(2) INFORMATION FOR SEQ ID NO:754:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

```
GAATTC TAGA CCTGCCTCGA GCCCTTTGTG GTTTTAAAGA AAAAATTCT GTGCAGATCT    60
GTTCTCTCTC CTGCTCCTTC CCTTTCTCT ACATACAGTG CTCATTGGAG GCTCCCCACT    120
CGAG                                124
```

(2) INFORMATION FOR SEQ ID NO:755:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

GAATTCGGCC	TTCATGGCCT	AATCGGTGTC	TTTGGTAAAA	ATTCTATGAG	GATGACATAT	60
TCCATCATGT	TATTCGTTTC	ACATTTCCCT	TTGCTCAGTC	TCCAATGCAA	GCACAGCTTG	120
TGGTATAACC	TATTGTTTTT	CCATTCTAAT	AACCTCTCAA	TCGATCTTCG	TGTTCTTTTA	180
CTGAGGCAAA	TAACTGGCCA	CATACTGCAA	CCTAATGTGC	AGCAGCAACA	AAGGCAGCCA	240
CAAGTAGCC	AACGTACATT	AACAGGAAGG	TTCTTCTTAA	GACAACTGTT	AACCTCTGTTG	300
ATGCTGGCTT	TAAATTCTTC	AGGAGCTACT	TTTTCAGTTA	ATGAAGAAGG	GAATTCAGAT	360
TCAAATTTG						369

(2) INFORMATION FOR SEQ ID NO:756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

GAATTCGGCC	TTCATGGCCT	ACCGGCGAGG	AATAGGAATC	ATGGCGGCTG	CGCTGTTCGT	60
GCTGCTGGGA	TTGCGCTGTC	TGGGCACCCA	CGGAGCCTCC	GGGGCTGCCG	GCACAGTCTT	120
CACTACCGTA	GAAGACCTTG	GCTCCAAGAT	ACTCCTCACC	TGCTCCTTGA	ATGACAGCGC	180
CACAGAGGTC	ACAGGGCACC	GCTGGCTGAA	GGGGGGCGTG	GTGCTGAAGG	AGGATGCGCT	240
GCCCGGCCAG	AAAACGGAGT	TCAAGGTGGA	CTCGGACGAC	CAGTGGGGAG	AGTACTCCTG	300
CGTCTTCCTC	CCCAGGCCA	TGGGCACGGC	CAACATCCAG	CTCCACGGGC	CTCCAGAGT	360
GAAGGCTGTG	AAGTCGTCAG	AACGCATCCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

GAATTCGGCC	TTCATGGCCT	ACTGATGTTG	AAGACGACAC	CACGGCTTTG	ATGGAATATC	60
AGATATTGAA	AATGTCTCTC	TGCCTGTTC	TCCTTCTGTT	TCTCACACCT	GGTATTTTAT	120
GCATTTGTCC	TCTCCAATGT	ATATGCACAG	AGAGGCACAG	GCATGTGGAC	TGTTTCAGGCA	180
GAAACTTGTC	TACATTACCA	TCTGGACTGC	AAGAGAATAT	TATACATTTA	AACCTGTCTT	240
ATAACCACTT	TACTGATCTG	CATAACCAGT	TAACCCAATA	TACCAATCTG	AGGACCCTGG	300
ACATTTCAAA	CAACAGGCTT	GAAAGCCTGC	CTGCTCACTT	ACCTCGGTCT	CTGTGGAACA	360
TGTCTGCTGC	TAACAACAAC	ATTAACTTC	TTGACAAATC	TGATACTGCT	TATCAGTGGA	420
ATCTTAAATA	TCTGGATGTT	TCTAAGAACA	TGCTGGAAAA	GGTTGTCCCTC	ATTAAAAATA	480
CACTAAGAAG	TCTCGAG					497

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

GAATTCGGCC	TTCATGGCCT	AACCAAATCA	ACAACAACCT	ATTTAGCTGT	TCCCCAACCT	60
TTTCCTCCGA	CCCCCTAACA	ACCCCCTCC	TAATACTAAC	TACCTGACTC	CTACCCCTCA	120
CAATCATGGC	AAGCCAACGC	CAGTTATCCA	GTGAACCACT	ATCAGGAAAA	AAACTCTACC	180
TCTCTATACT	AATCTCCCTA	CAAATCTCCT	TAATTATAAC	ATTACAGGCC	ACAAAACCTG	240
AG						242

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 221 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

GAATTCGGCC	TTCATAGCCT	ACCTAAATTA	ATAATAATGT	ATAGTTCAGA	ATTGCTAAGA	60
GTACTTTTTT	TTTTTTTTTT	TNGAGACAGG	TTCTCGCTCT	GCCCTCCAGC	CTGGTGACAG	120
AGCAAGATTC	CATCTCAAAA	AAGAAAAAAA	ACACACAGCT	AATAGAATTG	CCATTGTTTT	180
TCATAATAGA	ATCTAGCTGC	TTACTCCAAC	CTCACCTCGA	G		221

(2) INFORMATION FOR SEQ ID NO:760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

GAATTCGGCC	TTCATGGCCT	AAAATCAAAG	ACTTTGCCAA	TACCATTCCCT	GGCCATGGAG	60
GCATCATGGA	TCGCTTTGAC	TGCCAGTATC	TGATGGCCAC	CTTGTCAAT	GTATACATCG	120
CCAGTTTTAT	CAGAGGCCCT	AACCCAAGCA	AACTGATTCA	GCAGTTCCTG	ACTTTACGGC	180
CAGATCAGCA	GCTCCACATC	TTCAACACGC	TGCGGTCTCA	TCTGATCGAC	AAAGGGATGC	240
TGACATCCAC	CACAGAGGAC	GAGTAGGGGC	CACCCAGGGC	CAGGAGAACA	GGAACAGAAC	300
TGAGCAGGGG	CAGGTCTCCA	AGGCAAGCCC	AGCTGGTGTG	ACTTAGACAA	TGACGAGGCT	360
TCAACTCACT	GTCTTTTTTT	TTTTTTTTTG	GAGGGTATTT	TTTATTTGTG	GGTTCAAAAA	420
ATCTGTATAT	ACAGTCTATG	TGTTTAGAAT	TTGTGTTGTA	AGTAAACTAC	AGCTTTGAGT	480
TGGAAAGAAG	TCACGGGTTG	TAAAACCATT	TGGATTTTTT	TAAAACAAAA	GTATTAATAA	540
TCTGGAAGAC	TCGAG					555

(2) INFORMATION FOR SEQ ID NO:761:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(x1) SEQUENCE DESCRIPTION: SEQ ID NO:761:

GGCCGATCAG GTTATTTTTT GAAAGTTTTA CTTACAGAGC ATATAAATTA CCCTTGTTA	60
TTCTCAGCTG TGATTGAGTT CTGTGAAAGC ATAGTACCCT AGTACCCTGG GATATCTCTA	120
CATGTGAAAT TATTCAAATG TCTCCCTTAC TTTTTTTTTT TTTTTTTTG AGACAGGCTC	180
TGTTGCCCCAT GCTGCAGTGC AGTGGCACAA CTATGGCTCA TCTCAGCCTC GACCTCCTGG	240
GCTCAAGCGA TCCTCCCACC TCAGCCCCC AGGCAGCTGG GACCACAGGC ACACACCACC	300
ATGTCCAGCC AATTCCTGTA TTTT	324

(2) INFORMATION FOR SEQ ID NO:762:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

GAATTCGGCC TTCATGGCCT AGTGCCGGGG AGAAAGGGCT TCCTCCCCCA CACATCAGAC	60
AGGGCACCAA TGAGTGGGGC ACTCAAAAAA GAGAGCAGGC CCTGGAGAGG AAACCAAAGC	120
AAAGGTTAGT TTTATAATCT GATCCCTCAA TTACCTGTAA TTCATATTTT CTAAATGCAT	180
TAGCTCTAAT TCATTGTACT GCCCCCAAAA CAGAATAATA CTTTGAAACA TTAAATACAA	240
ACTACAATA AAAAATAAA ATTAGGCCTG GCGTGGTGGC TCATGCCTGT AATCCCAGCA	300
CTTTGGAAGG CCGAGGCGGG TGGATCACTC GAG	333

(2) INFORMATION FOR SEQ ID NO:763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

GAATTCGGCC TTCATGGCCT AATTGGAATC AACACAACCA CCCACAGCCT AATTATTAGC	60
ATCATCCCTC TACTATTTTT TAACCAAATC AACACAACC TATTTAGCTG TTCCCAACC	120
TTTTCTCCG ACCCCCTAAC ACCCCCCTC CTAATACTAA CTACCTGACT CCTACCCCTC	180
ACAATCATGG CAAGCCAACG CCACTTATCC AGTGAACCAC TATCAGGAAA AAAACTCTAC	240
CTCTCTATAC TAATCTCCCT ACAAATCTCC TTAATTATAA CATTCAAC CACAGAATC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

GAATTCGGCC	TTCATGGCCT	AGGGATTAA	AGAGTTTTTC	TTGGGTGTTT	GTCAAACCTT	60
TATTCCTGT	CTGTGTGCAG	AGGGGATTCA	ACTTCAATTT	TTCTGCAGTG	GCTCTGGGTC	120
CAGCCCCCTTA	CTTAAAGATC	TGGAAAGCAT	GAAGACTGGG	CTTTTTTTCC	TATGTCTCTT	180
GGGAAGTCA	GCTGCAATCC	CGACAAATGC	AAGATTATTA	TCTGATCATT	CCAAACCAAC	240
TGCTGAAACG	GTAGCACCTC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:765:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

GAATTCGGCC	TTCATGGCCT	ACCAACAGCA	AGCTCCAATA	TCACACATCC	AGACTCCTAT	60
GCTTTCCCAA	GAACAGGCAC	AACCCCGCA	GCAGGGTTTA	TTTCAGCCTC	AGGTGGCCCT	120
GGGCTCCCTT	CCACCTAATC	CAATGCCTCA	AAGCCAACAA	GGAACCATGT	TCCAGTCACA	180
GCACTCAATA	GTTGCCATGC	AGAGTAACTC	TCCATCCAG	GAACAGCAGC	AGCAGCAGCA	240
ACAGCAGCAG	CAACAGCAGC	AGCAACAACA	ACAGAGCATT	TTATTCAGTA	ATCAGAATAC	300
CATGGCTACA	ATGGCGTCTC	CAAAGCAACC	ACCACCAAAC	ATGATATTCA	ACCCAAATCA	360
AAATCCAATG	GCTAATCAGG	AGCAACAGAA	CCAGTCAATT	TTTCACCAAC	AAAGTAACAG	420
TCTCGAG						427

(2) INFORMATION FOR SEQ ID NO:766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

CGATTGAATT	CTTGCTGTT	CTGCCTCACT	CCCGAGCTCT	ACTGACTCCC	AACAGAGCGC	60
CCAAGAAGAA	AATGGCCATA	AGTGGAGTCC	CTGTGCTAGG	ATTTTTCATC	ATAGCTGTGC	120
TGATGAGCGC	TCAGGAATCA	TGGGCTATCA	AAGAAGAACA	TGTGATCATC	CAGGCCGAGT	180
TCTATCTGAA	TCCTGACCAA	TCAGGCGAGT	TTATGTTTGA	CTTTGATGGT	GATGAGATTT	240
TCCATGTGGA	TATGGCAAAG	AAGGAGGGTC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

GAATTCGGCC	TTCATGGCCT	ACGTAATTCT	GGAAAAGTGA	ATACTTGTGA	AGAGTCGTCT	60
TGAATGATTT	GTAAAAAATC	CTGTTCTTAT	ATTCAACGAG	TTTCGAATCT	TTGTCAGAGG	120


```

AGTATTACCA TTAGATTGAA AAAAAGGAAA ATAAATAATA AACACTTTTA AAAAAACTCC 180
CCATTCTCTT ATTCTCACTT TTAGGAAAAG AGACTGACTA ATATCTTCTG CCACAAATAC 240
CGATGTTCTT AAAAATATTT ATGGGACTGC TTTTGGCAAC CAGCCCTATT TTGTTTTCAT 300
ATCCCTTTTT GCTCCCATCT TTCCAACTC ATAAACTCGA G 341

```

(2) INFORMATION FOR SEQ ID NO:768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

```

GAATTCGGCC TTCATGGCCT ACAGAAAGAG TTTGAGACCT GAATAGCTCC CAGATTTCAG 60
TCTTTTCCTG TTTTGTGTTA CTTTGGGTGA AAAAAAAAAA AAGTCTGATT GGTTTTAATT 120
GAAGGAAAGA TTTGTACTAC AGTTCTTTTG TTGTAAAGAG TTGTGTTGTT CTTTTCCCCC 180
AAAGTGGTTT CAGCAATATT TAAGGAGATG TAAGAGCTTT ACAAAAAGAC ACTTGATACT 240
TGTTTTCAAA CCAGTATACA AGATAAGCTT CCAGGCTCGA G 281

```

(2) INFORMATION FOR SEQ ID NO:769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

```

GAATTCGGCC TTCATGGCCT ACTAACGAGG AAAGGGATTT AAAGAGTTTT TCTTGGGTGT 60
TTGTCAAAC TTTATTCCTT GTCTGTGTGC AGAGGGGATT CAACTTCAAT TTTTCTGCAG 120
TGGCTCTGGG TCCAGCCCCCT TACTTAAAGA TCTGGAAAGC ATGAAGACTG GGCTTTTTTTT 180
CCTATGTCTC TTGGGAACTG CAGCTGCAAT CCCGACAAAT GCAAGATTAT TATCTGATCA 240
TTCCAAACCA ACTGCTGAAA CGGTAGCACC TGACAACACT GCAATCCCCA GTTTAAGGGC 300
TGAAGCTGAA GAAAATGAAA AAGAAACAGC AGTATCCACA GAGAGACTCG AG 352

```

(2) INFORMATION FOR SEQ ID NO:770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

```

GAGCGTGGTG GATATAAAAC AGGTAAGAGA CTTTCATGGT ATACCTTTAT ATTGTTGGAT 60
TAAAGGCACT GCCAACTCAA AAAACTTAAC CGAAAATTTT TTTTAATCAG TTAAATATTT 120
ACTGATATGA AAATGACATG AACTTAACCT TTTGTGTTT ACTTAAAGGG TGCTCTGTTT 180
GAAACTTCCT CAGACAACTG AATGGGAGAA CCAGATGAAT TTAGTAAAAG TATTAACGTC 240
AAATATTTAT ACTGCTTTTT TTTGTTTGTT TGTTTTTGAG ACAGAATCTT GCTCTGTTC 300

```

CCAGGCTGGT CTCGAG

316

(2) INFORMATION FOR SEQ ID NO:771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

GAATTCGGCC	TTCATGGCCT	ACTTTGATGG	AATATCAGAT	ATTGAAAATG	TCTCTCTGCC	60
TGTTCATCCT	TCTGTTTCTC	ACACCTGGTA	TTTATGCAT	TTGTCCTCTC	CAATGTATAT	120
GCACAGAGAG	GCACAGGCAT	GTGGACTGTT	CAGGCAGAAA	CTTGTCTACA	TTACCATCTG	180
GACTGCAAGA	GAATATTATA	CATTTAAACC	TGTCTTATAA	CCACTTTACT	GATCTGCATA	240
ACCAGTTAAC	CCAATATAAC	AATCTGAGGA	CCCTGGACAT	TTCAAACAAC	AGGCTTGAAA	300
GCCTGCCTGC	TCACTTACCT	CGGTCTCTGT	GGAACATGTC	TGCTGCTAAC	AACAACATTA	360
AACTTCTTGA	CAAATCTGAT	ACTGCTTATC	AGTGAATCT	TAAATATCTG	GATGTTTCTA	420
AGAACATGCT	GGAAAAGGTT	GTCCCTCATTA	AAAATACACT	AAGAAGTCTC	GAG	473

(2) INFORMATION FOR SEQ ID NO:772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

ATACAGTAAT	CAAAGTAAGT	AATATTTCAA	TCCAATATTT	TTAAAAATCA	GAATTAATGC	60
AAAAAAAACC	ATGATGAACA	AAATATTAAA	ATTTAAAATA	AAGACAGGAT	TAGTATTACT	120
GAGTTTTCCT	TTGTGCCAG	GCTCTAATAT	GGCTTGCCAT	GGGGCAGAAC	ATTACAACAT	180
ACCAGTCGTG	TCATGGTGCC	CAAGGCTCCA	CAGACCTCAG	TGGCTCCCTG	CTGCCTGCCA	240
CAGCAATCTC	GAG					253

(2) INFORMATION FOR SEQ ID NO:773:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

GAATTCGGCC	TTCATGGCCT	AGTGAGAATT	GACTGTTGCT	TTTGTTTGCC	TGCTTACTGT	60
TTTCTTTTAT	TTATTTGTTT	TTGGACCTGT	GGCACAAAGG	ATCTGTTTAC	TGACCATCCT	120
TATTGTGAGG	CACACAGTCA	CCATGGCACC	CTGCGCGTTA	CTCCTGTTCC	ACTTGTTTAT	180
TCTCTGTATC	CCCATACTAG	TTATTATCGA	AACCATCAGC	CTACTCATTC	AACCAATAGC	240
CCTGGCCGTA	CGCCTAACCG	CTAACATTAC	TACAGGCCAC	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:774:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

```

GAGGCTGACA AAATACTCAC CTTTACCTTT ATTTTTCAT TTTATACTCA CAACCATATT      60
TTTTTTGGCC CCCTTCCCTT TATTTTAACT CATAACTGAT ACTTAAAGGT GCTCTGCCCT      120
ATTAAATCAG CTCCTAGGCT GCAAGTGCAT AATATTTAAA AATTGCAAC TTTGACTTTT      180
TAAAAATCTG GTCTTGGTAT GGAGCAACTT TGCCTTTTTT TTTTTTTTTT TTGAGACAGA      240
GTCTCGCTTT NTCGCCCAGG CTGGAGTGCA GTGGTCCCAT CTCAGCTCAC TGCAACCTCC      300
TCCTCCCGGG TTCAAGAGAT TCTCCTGCCT CAGCCTCCCG AGTAGCTGGG ATTACAGGTG      360
CCTGCCCCAA CACCCTCGAG                                     380

```

(2) INFORMATION FOR SEQ ID NO:775:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

```

GGCCTGGTAG GATAAGAATA TAAACTTCAG GGTGACCGAA AAATCAGAAT AGGTGTTGGT      60
ATAGAATGGG GTCTCCTCCT CCGGCGGGGT CGAAGAAGGT GGTGTTGAGG TTGCGGTCTG      120
TTAGTAGTAT AGTGATGCCA GCAGCTAGGA CTGGGAGAGA TAGGAGAAGT AGGACTGCTG      180
TGATTAGGAC GGATCAGACG AAGAGGGGCG TTTGGTATTG GGTATGGCA GGGGGTTTTA      240
TATTGATAAT TGTGTGATG AAATTGATGG CCCCTAAGAT AGAGGAGACA CCTGCTAGGT      300
GTAAGGAGAA GATGGTTAGG TCTACGGAGG CTCCAGGGAA GCTCGAG                                     347

```

(2) INFORMATION FOR SEQ ID NO:776:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

```

GAATTCGGCC TTCATGGCCT AAGAGGATAA GGGAAGAAAA AGAAGAAAGT ATTCCATTCC      60
CACATCCCTT TAGGTTGGCT TCTTATTTTA TGTTTTTGTG GGTGTGTTTA TTTTGCTTTG      120
TTAACATTTT CAACTAGCTA TAGAAACGTT TGCAATTCTT ATTACTGATT AGCATTCCAA      180
AACTTTGTAA TGAACATTTT TCTCTCTTTC TTTTTTTTTT TTTTNGAG ACAGGGTCTC      240
GCTCTGTAC CAAGCTGGAG TGCAGTGAGC CAAGATCCTA CTGCTGTCCA TTCCAGCCTG      300
GGTGACAGAA CAAGACCTTG TCCGCCACCC TTCCACCCCC CCCTCGAG                                     348

```

(2) INFORMATION FOR SEQ ID NO:777:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

```

GAATTCGGCC TTCATGGCCT ACATGTTTAT TGAGCATTTA CTGTTTACCC ATCAGTATTC      60
TTGATGCTAA GGATATAGCA GTGAACAAAA CAATCCTTGT GGACTTACAT CATAGTAGGG      120
AAAATAGACA ATAAATAAAT GTATGATAAG TCAGTTGATA ATAAGTGCTA CGAAGTAAAA      180
CAAAGCAGGA ATAAAGTTGG GGAGAAAAGT GGAGGGTGAT TGCTATTTCA GTTGAGATCA      240
TTGGGATGGT CTTTCTGAG GAGGGGACAT TTGCATAGAG AAGCAAGGAT GTGAGTTATG      300
TGTCTGCTGT GTGTAGAACA TTCTGGGAAA GGGCAGAGAA GGAACAAGA CTATTCCAGA      360
AAAAGAGGGC ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:778:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

```

GAATTCGGCC TTCATGGCCT AGCACAGCTA GACGGTTCCA GCTCAGGGTC TCTCATGAAG      60
TTGCAATCAA AATATTGGCA GGAGAGAAAA ACATATTTTC AGAAGCTGCA GGCATAGGAA      120
GACTTGGCTG GGGTTGAAGG ATCCACTTCC AAGATGGCGC ACTCAGTGGC TCTTGGCTGG      180
AGGCCTCAGT TCCCTGCTGC GTGGAGCTCT CCCTCCAGCT GCTTGAGTGG ACTCATGACA      240
TGCAGCTGGC CTCCCCTGGA GCAGTCGATC CAACAATGAG CATGGCCATG AACTAGAGCT      300
CGAG

```

(2) INFORMATION FOR SEQ ID NO:779:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

```

GAATTCGGCC TTCATGGCCT AGCCAAAACC ACAGAATATA TAATATAGAT CTTGGGGATA      60
CAGCAGAGAA AAAAGACAAA AATCCCTGTT ACAATCCGTT CTAGAATTGA TGTTCCTTTG      120
TTGGTTAATT CAAGTTTGA TTTAGAAAT CTTACCTCTT GGTGACTGCC TAGAGTGGCA      180
TTGGGCTGGA GGGGAGGAAC TGTTTCATGTT GGAAATGGGG AATGGGCCAA AAATGCAATT      240
GAGTAGGTTG ATTAACCTGT CTGCTGTCAG AGTGAAGCA GGGGTAGTTT CCCTTCCGA      300
CCAGAGGCAT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:780:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

```
GAATTCGGCC TTCATGGCCT ACAGAAGATT TGGACAATTC CATTGATAAA ACAGAAGCTG      60
GAATTAAGGA GCTTCAGAAG AGTATGGAGC GCTGGAAAAA TATGGAAAAA GAACATATGG      120
ATGCTATAAA TCATGATACT AAAGAACTGG AAAAGATGAC AAATCGGCAA GGCATGCTAT      180
TNAAGAAGAA AGAAGAGTGT ATGAAGAAAA TTCGAGAACT TGGATCACTT CCCCAGGAAG      240
CATTGAAAA GCACCAGGCT CGAG                                         264
```

(2) INFORMATION FOR SEQ ID NO:781:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 580 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

```
GAATTCGGCC AAAGAGGCCT AGCGATTGGG TCTTTGATAT CTGTAAGCCG TTGAATTAGC      60
CCTGCCCTCT GTTCTTAGTT TAGGAGACCA TAGATGTGCC CTTATTATTG AAAC TGATTT      120
TATTCAGTTA CTGAAGTTAT CTTACCTGAT ACATAATTTT ACCCATAGAA AATAATATGA      180
AAATAGCAAA ATCACTCAGG TAAGATAGAT GAGTGCCTGC TGTGTTCAAG AGACTGTAA      240
TATGAGGCTC TGGGGCTGCA AAAAATCAAG TTGCTAAGAA ATATGAGGTC AGAGCAGCAG      300
AAGTTCTGAG TAACCACTGA TTACTGGACT TGGGGTGATC AGAAGTGA CTGTGGGAGA      360
GGTGAAATTG AGCAGACTCT GAAGGAACCT CTGGGTTTTG GTAAATAGGG AGCTGGGGAT      420
GAGGATGCCC CAGGTTTTAG AAAGAACACA GGCTGTTGAA TCACACCTGG GTTCAAACCC      480
TGGCTTGCTA CTCCCTAGTT TGTGACCTTG TCAAATTCCT TGATTTCTTT TTTCTTTTTC      540
TTTTTTTAAT TTTGGAGACA ACAGTCTCGC TCTGTCACCC                                         580
```

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 131 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

```
GAATTCGGCC AAAGAGGCCT AGAATGGTAG AGTAAAAAGA ACCCTCTGCT GAGTAACCAA      60
GCCTTTAATT TCCTGTTCTT GCTGTAGGGC TTTCACAAAT GCATTTTTC GCGGTTGGT      120
GTGTCCTCGA G                                         131
```

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 121 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

GAATTCGGCC AAAGAGGCCT AGATTGAGGT TGTGGTAGAT TAGGCGTAGG TAGAAGTAGA	60
GCTTAAGGAG GGTGATGGTG GCTATGATGG TCGGCTCGA GGCAGGTCTA GAATTCAATC	120
G	121

(2) INFORMATION FOR SEQ ID NO:784:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 405 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

GAATTCGGCC AAAGAGGCCT AAGCAAGATG AAGCCCAACA TCATCTTTGT ACTTTCCCTG	60
CTCCTCATCT TGGAGAAGCA AGCAGCTGTG ATGGGACAAA AAGGTGGATC AAAAGGCCGA	120
TTACCAAGTG AATTTTCCCA ATTTCCACAC GGACAAAAGG GCCAGCACTA TTCTGGACAA	180
AAAGGCAAGC AACAACTGA ATCCAAAGGC AGTTTTTCTA TTCAATACAC ATATCATGTA	240
GATGCCAATG ATCATGACCA GACCCGAAAA AGTCAGCAAT ATGATTTGAA TGCCCTACAT	300
AAGACGACAA AATCACAACG ACATCTAGGT GGAAGTCAAC AACTGCTCCA TAATAAACAA	360
GAAGGCAGAG ACCATGATAA ATCAAAGGT CATTTTCACA GGGTA	405

(2) INFORMATION FOR SEQ ID NO:785:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 642 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

GAATTCGGCC AAAGAGGCCT ACTACTCACC TCTTGCTCTC TCCCAACCAT AGAAACAGCC	60
ACGACTCCTA CCACAAACTT GGGAAACACC ACCACTGAGA CCACCTCCCA CAGTACTCCC	120
AGCTTCACTT CTTCAGCCAT CTA CTCCACC GTCAACATAT CCACAACTAC CATCTCCTCA	180
TTTCCCCTT CCTCAGGTAC CATGGTGACA TTCACAACCA TGAACCCATC CTCTCTGAGT	240
ACAGACATAT CTACCACCAC ACTGAAAAAT ATCACCACAG CTTCTGTGGG CTCTACTGGT	300
TTCTGACTG CAGCTACAGA CCTCACCTCA ACATTCACTG TTTCCACTTC CTCAGCAATG	360
TCCACAAGTG TCACTCCATC TGCCCCCAGC ATCCAGAATA AAGAAATCTC AACACTTGTG	420
AGTACAACCA CTACCACCAG TCCCACTGAG AGAATGACTC TCACAAGTAC AGAGAATACC	480
CCGACAAGTT ACATCCTGAC CACCACTCCA GTGACATATT CATTTTCCCC TTCCATGTCT	540
GCCAGCAGTG ACTGGACCAC TGACACAGAG AGCATCTCCT CAGCTCCAGC CATCACCAGT	600
ACACTCCACA CAACAGCTGA ATCCACCCTG GCAGGTCTAG AA	642

(2) INFORMATION FOR SEQ ID NO:786:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 469 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

GAATTCGGCC	AAAGAGGCCT	ATGGCCTTGG	AAGGGATGAG	CAAACGGAAG	AGAAAGAGAA	60
GTGTCCAGGA	GGGAGAGAAT	CCTGACGACG	GCGTTCGCGG	GAGTCCGCCG	GAAGACTACA	120
GGCTTGGACA	GGTCGCCAGT	AGCTTATTTT	GCGGCGAACA	CCATTCCAGA	GGTGGCACCG	180
GTCGGCTGGC	GTCCCTCTTC	AGTTTCTTGG	AGCCCCAGAT	TCAACCCGTG	TACGTGCCTG	240
TGCCTAAACA	AACCATCAAA	AAAACGAAAC	GGAATGAGGA	GGAAGAAAGT	ACATCCCAGA	300
TTGAAAGACC	ACTTTCGCAA	GAACCTGCCA	AAAAAGTGAA	AGCGAAGAAG	AAACACACTA	360
ACGCAGAAAA	AAAGTTGGCA	GACAGGGAAA	GCGCTCTAGC	GAGTGCTGAT	TTAGAAGAAG	420
AAATTCACCA	GAAACAAGGG	CTTAGCTCGA	GCAGGTCTAG	AATTCAATG		469

(2) INFORMATION FOR SEQ ID NO:787:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 501 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

GAATTCGGCC	AAAGAGGCCT	AAGAAAAGAT	ATAAATCAGA	GAAAAAGCAT	GAAGCGTATC	60
ATATTGATTT	TAACAGTATT	GCTTGCCATG	TTAGGGCAGG	TTGCCTATGC	GCAGAAAACG	120
TGTGTTCATG	CATCGGCAGA	AAATCATGTG	CCTATTCGTG	AAGCACTTAT	TCATACCAAT	180
AACAATCATT	GGGCAAGAAC	AGATTATCGG	GGCTATTGGA	CGATGCGCTA	TCAGTTTGAT	240
TCAGCAACCG	TATCGAAACC	TGGTTTTATG	AAGGCAACTA	TCCGGTACAA	GGAAGTGCCG	300
GATACTCTGT	TTCTCTTGCC	GGATGCCAAA	CAGTTAGGCG	AAGTGACAGT	TTGGGGCAAG	360
AATCAGGAAG	GCATCAAAAA	TATGGAAGAG	GATATTCAGG	AGAAGATAAA	CTCTTGCCA	420
ACTTCATCTG	CTGGCATTGG	TTTTGATGCT	TTCGGATGGA	TGGATAAACA	GGGAAAACGT	480
GATAAGAAGC	ATCTGCAACA	G				501

(2) INFORMATION FOR SEQ ID NO:788:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 122 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

TGATGATCGA	TATCCAGAAA	GACACTGCGG	TGGAAGGTGA	GGAGATTGAA	GTCAACTGCA	60
CTGCTATGGC	CAGCAAGCCA	GCCACGACTA	TCAGGTGGTT	CAAAGGGAAC	GCAGAAGCTG	120
AG						122

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 274 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

GGTGAGCTGA GATCGCACCA CTGCACTGCA AGACCCTGTC TCAAAACAAA CAAACAAACA	60
ACAACAACAA CAACAAACCA AACCAAACAA AAAACCTGCA TAGCCAACTA GACCAGCATA	120
GAGGGCGAAA ACCATGCTTT TTGTCAAATG GTACTGTTTA TTCTGTTTGT CTGTCAGCTG	180
GTTTGCCCGT TCTGATAAAG CTAGCCCTTG CTGTGTGCAT GCAGGTATA GTGCCCAGGC	240
TCATATTTC TCTTCTTGCT GCACCTCACT CGAG	274

(2) INFORMATION FOR SEQ ID NO:790:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 209 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC TTCATGGCCT AGGGAAAGGA GCGGGCAGCC AGGCTGTGTC CCCTGACCGT	60
TGGAGCGTCT GCGACCCCG CATCCCCGCA CCCTCAAGGC ACCTCCAAAG ATGATGATGG	120
GTTGTGGGGA GTCAGAGCTG AAGTCGGCGG ACGGGGAAGA AGCCGCGGCG GTCCCCGGGC	180
CACCCCCGGA GCCCAAGTC CCGCAACCG	209

(2) INFORMATION FOR SEQ ID NO:791:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 389 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

GAGAGAATTA AAGAGAACCA CNAAGCTGAA CCTCAAAAAG TTAGCCTGGC GAGGGGAGGA	60
TGATGAGATT TCCCTGTGTG TCACATAAAC AAGGAAGTAA AGGGGGCCCC TTGTGCTCTC	120
AGAACTCCAA GCATGAAACG ATAGCAAAGG GAAAAACAGC TAAGTGTTTC CTGGCTGAAT	180
TTTATTTTGC TTTCAGTTTC TGCCATTTCG GTTCCTGTTA TCGTGCTTTG AGGTGCACTG	240
AAGTGCAGCA AAGCCAGGGG ATCCAAGGCT ACGTTGAAAA GCCTTTGACC ACAGTGCAGG	300
GAGCAGAAGA CATTAAATGAC GTGATGTCGA CACAGCCCGC ACTCAGGATC CTCCAGGAAA	360
AGAACACAGA GATAACCCCG GAACTCGAG	389

(2) INFORMATION FOR SEQ ID NO:792:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 332 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

```

GTGCTTTGGA TTTTGCATCC AGCTTTTCT CAACACCCCC GCTGGAATC AGCGGCTCCA    60
TCTCTTCGCC TTCGGAAGCA CCTGCGTCTC TGTCTGTGAT GCCGAGTGAC TTGTCCCCCT    120
TCACATCTCA GTCTTTTCT CCCTTGGTTG AGACATTTAC ATTGTTTGAC TCTAGTGATC    180
TGCAGTCATC TCAGCTGTCT CTTCCAGTT CCACAAATCT TGAGTTTTCG CAGCTCCAGC    240
CAAGTTCCGA GCTGCCTTA AACACCATCA TGTGTCTACC TANCCGTTCT GAGGTGTCAC    300
CATGGTCAAG CTTCCCTTCT GATTCTCTCG AG                                  332

```

(2) INFORMATION FOR SEQ ID NO:793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

```

GAATTCGGCC TTCATGGCCT ACTGGAATTT CTTTCTTGCC CTTTCATATT TTAAGATGGC    60
TGGAATAGCA CAGGGAGTAT ATAGCAGATA TCTTCTGGGA AATAATTCAT CTGAGGATAG    120
CTTTTATTTT GCCAATATTG TGCAACCTCT GGCAGAAACT GGACTACAAC TCTCCAAACG    180
AACTTTCAGT ACTGTACTAC CACAGATTGA TACTACTGGA CAGTTGTTTG TACAGACTCG    240
GAAAGGTCAG GAAGTTCTCG AG                                  262

```

(2) INFORMATION FOR SEQ ID NO:794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

```

GAATTCGGCC TTCATGGCCT ACTATGCCGT CATGATAGAG AAGATGATCC TGAGAGACCT    60
GTGCCGTTTC ATGTTTGTCT ACGTCGTCTT CTTGTTCCGG TTTTCCACAG CGGTGGTGAC    120
GCTGATTGAA GACGGGAAGA ATGACTCCCT GCCGTCTGAG TCCACGTCGC ACAGGTGGCG    180
GGGGCCTGCC TGCAGGCCCC CCGATAGCTC CTACAACAGC CTGTACTCCA CCTGCCTGGA    240
GCTGTTCAAG TTCACCATCG GCATGGGCGA CCTGGAGTTC ACTGAGAACC ATGAATTCT    300
CGAG                                  304

```

(2) INFORMATION FOR SEQ ID NO:795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

```

GCGATTGAAT TCTAGACCTG CCTCCAAGCA GCTGCAGTAT CTCGGAAGAA AAAACGAAGA      60
ATGGGAACCT ATAGCCTGGT TCCTAAGAAA AAGACCAAAG TATTAATAACA GAGGACGGTG      120
ATTGAGATGT TTAAGAGCAT AACTCATTCC ACTGTGGGTT CCAAGGGGGA GAAGGACCTG      180
GGCGCCAGCA GCCTGCACGT GAATGGGGAG AGCCTGGAGA TGGACTCAGA TGAGGACGAC      240
TCAGAGGAGC TCGAG                                     255

```

(2) INFORMATION FOR SEQ ID NO:796:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

```

CTAGTCTTCC AACCCCTTCTG GACTTTCTTT GCTCTTGTCT TGTTTGGGT GTACTGGATC      60
ATGACACTTC TTTTCTTGG CACTACCGGC AGTCCTGTTC AGAATGAGCA AGGCTTTGTG      120
GAGTTCAAAA TTCTGGGCC TCTGCAGTAC ATGTGGTGGT ACCATGTGGT GGGCCTGATT      180
TGGATCAGTG AATTATTCT AGCATGTCAG CAGATGACAG TGGCAGGAGC TGTGGTAACA      240
TACTATTTTA CTAGGGAAGT ACTCGAG                                     267

```

(2) INFORMATION FOR SEQ ID NO:797:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 185 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

```

GAATTCGGCC TTCATGGCCT AGGGGGAGTT TAGCTGAAAC AAGTTTTACA GAAGCAGAGC      60
TGGCAAATAG TTAAATATT AATGGTTAC AATGACAGT ACAAAACAAA TAAACAGTTC      120
CAGGTGCAGG GGCTTAAACT ATCACAAAGA GAGAAATGCA GGGGTTTGC GTGACATTCA      180
CCGAG                                     185

```

(2) INFORMATION FOR SEQ ID NO:798:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

```

GGGCGTGTGA CGACTGCTGG GAGAGGAAAG CGAGACATCA TTCCAACCCT CCAGAAGCTA      60
AAGATCCTGG AACTCAAGGG GAAACTAAC GTAAGTCCGA AAGCGAACAA GCAAACATGT      120
CCTCAACGGG GCAGGCAGGC TGTCGGGGTA CAGAGCTGGG ATCTGGGAAG GAACAGAGAG      180
GGCCGCTCAG GGAGAGGAAG CACAGTGCCA CCGGAGGCAC GCACTCAGCA GGCCTCGCA      240
GGCTGGGCAG AGGTAGAGAA GCAGCCTGC ACAGGCAGGC AGCTGACCCA GGGCTCTTAG      300

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AGCCGGGCAG	GAGAGCTGGT	GTGGGACCTG	GGAGGAGGAC	AGGAGCCTTC	AAAGCAGCAC	360
CGCCTGATTG	CAGCCAGGAG	GGTAGCATCA	AGGAAGATGG	AACTGCGGCC	AGGCCACATC	420
CGAGGGTGCT	CGAG					434

(2) INFORMATION FOR SEQ ID NO:799:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAAAAGTCGG	ATGCTGGCCT	CTGGAAATCA	GCCAGATCAA	GATATTACAC	ATTTCTTCCA	60
ACAGATCCAG	GAGCTCAATT	TGGAAATGGA	AGACCAACAG	GAGAACCTAG	ATACTCTTGA	120
GCACCTGGTC	ACTGAACTGA	GCTCTTGTGG	CTTTGCGCTG	GACTTGTGCC	AGCATCAGGA	180
CAGGGTACAG	AATCTAAGAA	AAGACTTCAC	AGAGCTACAG	AAGACAGTTA	AAGAGAGAGA	240
GAAAGATGCA	TCATCTTGCC	AGGAACAGTT	GGATGAATTC	CGGAAGCTGG	TCAGGACCTT	300
CCAGAAATGG	TTGAAAGAAA	CTGAAGGGAG	TATTCCACCT	ACGGAACCTT	CTATGAGTGC	360
TAAAGAGTTA	GAAAAGCAGA	TTGAACACCT	GAAGAGTCTA	CTAGATGACT	GGGCAAGTCT	420
CGAG						424

(2) INFORMATION FOR SEQ ID NO:800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GAATTCGGCC	TTCATGGCCT	AGGGGTGCTG	TGTGTTTTTC	AGGGCGCCCT	GCGTCCGGCA	60
GAGGAGGCGA	GCATCCCGCT	CAGGTGATGA	GGAACCCCTC	GCGCACCCAG	CGCAGAAGGC	120
TGCTGCCGCC	GGACGCCTCC	ATTGTTTGAC	CACAACAAGG	GCCGGATTCT	CACCCAGCAG	180
GATCCTAAGG	CCTTTGTAGT	CCTTCAGCCA	CTGTGGGCCC	TGCCTCTGCC	TGTTCTTCTG	240
GAATGTCTTG	GGGGTTTTGA	TCCTGTCACT	GTGACCTGCA	AATCCAAGAG	ACAACTCGAG	300

(2) INFORMATION FOR SEQ ID NO:801:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

GAGAAATCAG	TGAAGGATTT	GCAACGCTGC	ACCGTTTCTC	TAACTAGATA	TCGCGTCATG	60
ATTAAGGAAG	AAGTGGATAG	TTCCGTGAAG	AAGATCAAAG	CTGCCTTTGC	TGAATTACAC	120
AACTGCATCA	TTGACAAAGA	AGTTTCATTA	ATGGCAGAAA	TGGATAAAGT	TAAAGAAGAA	180
GCCATGGAAG	TCCTGACTGC	TCGTCAGAAG	AAAGCAGAAG	AACTAAAGAG	ACTCACTGAC	240

CTTGCCAGTC AGATGGCAGA GATGCAGCTG GCCGAACTCA GGGCAGAAAT TAAGCACGGT 300
CTCGAG 306

(2) INFORMATION FOR SEQ ID NO:802:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

GCTCGCGGCC GTTCAGAATT ATAAGGCTGT CTGCAGAGAT TTGAAAAATG GCAACAAATG 60
AAAGTGTGAG CATCTTTAGT TCAGCATCCT TGGCTGTGGA ATATGTAGAT TCACTTTTAC 120
CTGAGAATCC TCTGCAAGAA CCATTTAAAA ATGCTTGGA CTATATGTTG AATAATTATA 180
CAAAGTTCCA GATTGCAACA TGGGGATCCC TTATAGTTCA TGAAGCCCTT TATTTCTTAT 240
TCTGTTTACC TGGATGTCTC GAG 263

(2) INFORMATION FOR SEQ ID NO:803:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

GAATTCGGCC TTCATGGCCT AAATAGTTAG TCACCTTCTG ACCTTCTCCT CTTTCTCAAA 60
GCCTTCTGTC CCTGGTTTTT GCAAGTGCTG CATTTCCGCC GAGAATCCGC GTTGCTTACT 120
GCTGCCACCT CCTGTTTATT TAGAACTATG CAAAGACTCC GCTTCCGTTT TCCTGAGCTC 180
CTCGGGCCCC AGAGTCTCTG TTTGATTATT TATTTATTTA TTTATTTATT TGCCAAAAAT 240
TCTCCTCTTC AACTTATAGA ATGCACCCAA CTCGAG 276

(2) INFORMATION FOR SEQ ID NO:804:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

GAATTCGGCC TTCATGCCTA CAGCCATATT AAAACTAAGT AAAGTCTGCC CTGGGAACCTA 60
CACTTTCAGC TTGACTGTAG TAGACTCTGA TGGAGCTACC AACTCTACTA CTGCAAACT 120
GACAGTGAAC AAAGCTGTGG ATTACCCCCC TGTGGCCAAC GCAGGCCCCA ACCAAGTGAT 180
CACCCTGCCC CAAAACCTCA TCACCCTCTT TGGGAACCTG AGCACTGATG ATCATGGCAT 240
CACCAGCTAT GAGTGGTCAC TCAGCCCAAG CAGCAAAGGG AAAGTGGTGG AGATGCAGGG 300
TGTTAGAACA CCAACCTTAC AGCTCTCTGC GATGCAAGAA GGAGACTACA CTTACCAGCT 360
CACAGTGAAT GACACAATAG GACAGCAGGC CACTGCTCAA GTGACTGTTA TTGTGCAACC 420
TGAAAAAAT AAGCCTCCTC AGGCAGATGC AGGCCAGAT AAAGAGCTGA CCCTTCCTGT 480

GGATAGCACA ACCCTGGATG GCAGCAAGAG CTCAGATGAT CAGAAAATTA TCTCATATCT 540
CTGGGAAAAA ACACAGGGAC CTGATGGGGT GCAGCTCGAG 580

(2) INFORMATION FOR SEQ ID NO:805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

CAAATTGATT TCGGCACAGT TCTGGGAGCT GGGACATTCA AGGTCACCAC GTTGCCACCT 60
GTGAAGGCCT TCTGCTGCAT CCTCATGTTG GGGAAGATCA GAAGTGAGAA CACATGCTGG 120
CCAGTCCTTT CACAGCAGCA TCAATCCGTG CATGGGGCAG GGCCCTCGGC CTGAGCGCCT 180
CCCCAGGCC CTAACCTCCA GCACTGCCCT GCTGGGGATG GAATTTCCAA CATGAATCTG 240
GGGGATGCTT TCGGACCACA GCCGGGGAGC CTGCCCTGGC TTCCAGCTGC TGGTGGCCCA 300
GGGGCTCCCT GGCTTGCTC GAG 323

(2) INFORMATION FOR SEQ ID NO:806:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

GCGATTGAAT TCTAGACCTG CCATTCTCGC TCTGCCGACG TTGACTCTCT CTCTGAATCC 60
AGTCCCAACT CCAGCCCTGG CCCCTGTCCT GAGAAGGCC CACCACCCCA GAAGCCCAGC 120
CATCTCCAG GGGGCCCTCA TCGCCATCGT CTGCAACGGT CTCGTGGGCT TCTTGCTGCT 180
GCTGCTCTGG GTCATCCTCT GCTGGGCCTG CCATTCTCGC TCTGCCGACG TTGACTCTCT 240
CTCTGAATCC AGTCCCAACT CCAGCCCTGG CCCCTGTCCT GAGAAGGCC CACCACCACT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:807:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

GAATTCGGCC TTCATGGCCT AGATATGAGA AATGAGTGTT GGACGTCGAA GAATAAAGTT 60
GTTGGGTATC CTGATGATGG CAAATGTCTT CATTATTATT ATTATGGAAG TCTCCAAAAG 120
CAGTAGCCAA GAAAAAATG GAAAAGGGGA AGTAATAATA CCCAAAGAGA AGTTCTGGAA 180
GATATCTACC CCTCCGAGG CATACTGGAA CCGAGAGCAA GAGAAGCTGA ACCGGCAGTA 240
CAACCCCATC CTGAGCATGC TGACCAACCA GACGGGGGAG GCGGGCAGGC TCTCCAATAT 300
AAGCCATCTG AACTACTGCG AACCTGACCT GAGGGTCACG TCGGTGGTTA CGGGTTTAA 360

CAACTTGCCG GACAGATTTA AAGACTTTCT GCTGTATTTG AGATGCCGCA ATTATTCCT	420
GCTTATAGAT CAGCCGGATA AGTGTGCAAA GAAACCTTTC TTGTTGCTGG CGATTAAGTC	480
CCTCACTCCA CATTTTGCCA GAAGGCAAGC AATCCGGGAA TCCTGGGGCC AAGAAAGCAA	540
CGCAGGGAAC CTCGAG	556

(2) INFORMATION FOR SEQ ID NO:808:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

GGAAACTTCT AAACATTTTT GCTCGCAACT TTTACAACAT GAGAATGTGA GCCTTATTTG	60
TCGCATTTGC TATCAATTTT ATCTTGCTCT TTTATAAGGT CTCCACTTCT TCTGTGGTTG	120
AAGGAAAGGA GCTCCCCACG AGAAGTTCAA GTGAAAATGC CAAAGTGACA AGCCTGGACA	180
GCAGCTCCCA TAGAATCATC GCAGTTCCT ATGTACTAGA GGAGAGCAGC GGCTACATGG	240
AGCCACGTT GCGTATCTTA GCTATTCTGC ACACGGTCAT TTCTTTCTTC TGCATCATTC	300
GATACTACTG CTTGAAAGTC CCATTGGTTA TTTTAAAGC AGAAAAGGAA GTGCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:809:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

GAGANACGAC AATGTCCAGG AAACAGAACC AGAAGGATTC ATCAGGATTC ATTTTGTATT	60
TGCAGTCCAA TACCGTACTG GCCCAGGGAG GAGCTTTTGA GAACATGAAA GAGAAGATAA	120
ATGCGGTACG TGCAATAGTT CCTAATAAGA GCAACAATGA AATTATCCTG GTTTTGCAGC	180
ACTTTGATAA CTGTGTGGAC AAAACAGTAC AAGCATTTCAT GGAAGGTAGT GCCAGTGAAG	240
TACTCAAAGA ATGACAGTA ACAGNCAAGA AAAAGAACAA AAAGAAGAAG AAACTCGAG	299

(2) INFORMATION FOR SEQ ID NO:810:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 413 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

GAATTCGGCC TTCATGGCCT AGTAGCTGTT CCACTACAAT TCAATGTTAT CCAGGTTGGG	60
TGCATGTGTA ATGATATTTT TGTACTTTT TATCAACTCA GAATTTCCAG AGAGCTCTTC	120
CTGGCTGAAA AGATGTCCAA GGATCATCTC CGGAATGGAA GAGGTGAGGC CTGTTAGCTT	180
GTGGGCTGCC CAATCCATCC AACCCTTGGC ATTGGGATCA ATGTTGATGA GGACAAGACC	240
TTCAACAGTG TCCGGTGGT TAAGAGCATA TCTGCCAGG ATGTAGGCTC CAGCTCCAAC	300

ACCAACTCCA ATTATTGTAG AGAAATTTAG GTACTGCAGG ACGCAAGGGA TCATGTCTGC 360
AAGCTGGTCC AGAGATGGGT ACTGATATCC CAAAGGGAAC ACAGGGGGCTC GAG 413

(2) INFORMATION FOR SEQ ID NO:811:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 324 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

TTGGTATTGT CTCTGTACTA GTCTTTCCAA ATTCTGCTGT GAGCTTTTTG CTTAGACTGT 60
AAGCCTTAGA GTCACATCATC ACAGTAATCC TAAAGACAGA TTTTCTGTT CTATTTGATA 120
AGGCCTTTTT GTGGGTTGTG CCGACTGTCA GTTTCATGTT TGTTGTTTG TTTTGGAACT 180
GCAGTTACAT CCAGGAGACC TGTGGTGAGC ATAATGGGCT GTAGTTTGTG CAGTTGTCAG 240
TATAGCTTGT TAGGGAGCTC TTCCTGGGCA GAGTCTTGCA CAGCAGAGCC CAGTGCTGAG 300
CTGAGTTCTT GGCACCATCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:812:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 352 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

ACATTTCTTT GTAAGTTNNN AAAAGCCTAT GAGGGTTTTT TCCACGATTC CGTTCACAGT 60
TTGGCTTTTG TTGTTGTTGT GGCTGTTCTT GGCCCCCTG GGCCCTGCAG TGGAGTGGGG 120
GGCTGCACCT GGGAGCCTCG AGCTGAGGCC CAGCCCCCTC TGCCCTGCAT TTTCTGCCA 180
AGCAGCACCT GAGACTCTGA AGCCGATGCC TATACAGGCA GAAACCTGCC AATTCAGCT 240
TGAACGACTG GAGGGTCCTG AGGATGGGGG TCCCTGGGGT GCCATCATGG GCAGGGTGCA 300
TCTGTTTGGG TATGCTGCCC CCCAGCTGGC GGGGCACCGG GGACAGCTCG AG 352

(2) INFORMATION FOR SEQ ID NO:813:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 329 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

GAATTCGGCC TTCATGGCCT AGGGAAAGGG AANGTGGGGA GGGTCCGAGG GGAAGGGGAC 60
CCCAGCTTCC CTGTGCCCCG TCACCCCACT CCACCAGTCC CCGGTCGCCA GCCGGAGTCT 120
CCTCTCTACC GCCACTGTCA CACCGTAGCC CANATGGATA NCACNGTTGT CAGACAAGAT 180
TCCTTCAGAT TCCGAGTTGC CTACCGTTG TTTTCGTTGT TGTTGTTGTT GTNTTTNTTT 240
TTNTTTTNNN TNCGGAAGAC AGCAATAACC ACAGTACATA TTACTGTAGT TCTCNATAGT 300
TNCACATACA TTNATACCAT AACCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

```

GAATTCGGCC TTCATGGCCT ATCCATTTCC AAATCCACCA AGGTCCAGTC GACAGACATT      60
TCCAAAAAGA ATCCTGTTCT AGGACCACTT GCGCTGAGAG CACACCCGGG GGTCAAAGGG      120
CAGCCACCGG GGGTCAAAGG GCAGCCATCA GGTACTCCCC AGGGAAGGGC TTGCGGCCAC      180
CAGTCACTGC AACCCCGCCT CACCTCCGAT GCCTGCTGTG CCCAGGGTGG TCCCGCTCAT      240
AGCGACGGCC TNGCGTNCA TANGACCTCG AG                                     272

```

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

```

GATTGAATTC AATGTTAAGC ACCAATGCTG GATTTGGTGG TGGACTGAAC ACCAGTGCTG      60
GCTTTGGTGG TGGCCTAGGC ACCAGTGCTG GCTTCAGTGG TGGCCTAAGC ACAAGTTCTG      120
GCTTTGATGG TGGGCTAGGT ACCAGCGCTG GCTTCGGTGG AGGACCAGGC ACCAGCACTG      180
GTTTTGGTGG TGGACTGGGC ACCAGTGCTG GCTTCAGTGG CGGACTGGGC ACCAGTGCTG      240
GCTTTGGTGG TGGACTGGTC ACTAGTGATG GCTTTGGTGG TGGACTGGGC ACCAATGCTA      300
GTTTCGGCAG CACACTTGGC ACCAGTGCTG GCTTTAGTGG TGGCCTCAGC ACCAGCGATG      360
GCTTTGGCAG TAGGCCTAAT GCCAGCTTCG ACAGAGGACT GAGTACCATC ATTGGCTTTG      420
GCAGTGGTTC CAACACCAGC ACTGGCTTTA CTGGCGAACC CAGCACCAGC ACGGGCTTCA      480
GTAGTGGACC CAGTTCCTATT GTTGGCTTCA GCGGTGGACC AAGCACTGGT GTTGGCTTCT      540
GCAGTGGACC AAGCACCAGT GGCTTCAGCG GCGGACCGCT CGAG                                     584

```

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

```

GAGAATGTCC AGCAAGGAAG TGAAGACTGC TCTAAAAAGT GCTAGAGATG CAATCAGAAA      60
CAAAGAATAC AAAGAAGCTT TGAAACACTG TAAGACAGTG TTAAAGCAAG AGAAAAATAA      120
CTATAATGCC TGGGTTTTTA TTGGCGTTGC TGCAGCTGAA CTAGAACAAC CTGATCAGGC      180
CCAGAGTGCC TATAAAAAAG CTGCTGAATT AGAGCCAGAC CAATTACTAG CTTGGCAGGG      240
GTTAGCAAAC TTGTATGAGA AATATAATCA CATAAATGCT AAGGATGACT TGCCTGGTGT      300
TTACCAAAG CTCCTGGATC TTTATGAGAG TGTGACAAG CAGAAGTGGT GTGATGTCTG      360

```


CAAGAACTT GTGGATCTAT ATTACCAAGA AAAGAAACAC CTAGAGGTGG CTCGAACATG	420
GCACAAGTTG ATAAAAACAC GGCAGGAACA AGGTGCAGAA AATGAAGAGC TTCATCTCGA	480
G	481

(2) INFORMATION FOR SEQ ID NO:817:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 209 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

GAATTCGGCC TTCATGGCCT AGGGGGAGTG GTGGGTATTG CTAAGTTATC AGTTATTTAA	60
CCTTATGGAG TTTTATTTAA CCGTTTTTGT TTGACATGTT TTATATATAT GTAATTTTAT	120
TTATTCTTCA CAAAATCCCT GTGAGGGGGG TGGTACTATT GTCCCCATTT AAAGATGAGA	180
ACACTGAGGC ATGTCTAGAA TTCATCGAG	209

(2) INFORMATION FOR SEQ ID NO:818:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 220 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

GGCTCTGTGG AATTCCATGG CATCTCCCC GCCCCCCCCA ACCCCCCCTT TCCCCCTTC	60
TTTTTTTTTT TTTCTTTTCT TTTCTCCCCT CCCCCCTTT CACCATTTC CCTCGGAGGC	120
GCTTTCCCCG GGCAGGGGCA GAGCCGTCT CACCCCCGC CTCTCCCCGG CCCCCGCCG	180
CCTATGGCGA GAGGGAGCCC CCTCCCAACC CGGGCTCGAG	220

(2) INFORMATION FOR SEQ ID NO:819:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

GAATTCGGCC TTCATGGCCT ACACATTCTT TTAGTCAGAA ACATTAAAAT AGTAGAGTAA	60
GTTGGCTTGA AGTGAATTTT TGTGTGAAAT CTTTCTCTG CCCTAGCCTA GTTTGTCCAT	120
GCACATTTGC ACACAGGAAG AACATTTTGA GACCTGCCAG AATATGCAAT GACAGGGTAA	180
AAAATGCCCG AGGTTGACTG TGTTCATAGA CATTGTGCTA AACACTCAAC ACTCCTGATC	240
ACACTGAATG CTTTGACAG TCCTGTGAAT TGAGGGCTAT TATTATCCCC ATTTTATATA	300
TGAGCGAGCA GAGGCCGAGA CAGATTAACA AAGGTGCTCC CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:820:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

```

GCTTATACAG TGTCCGATAG ACACCAGGAA GCNACTAGCA GAGAATTTGG TAGTCATAGG      60
TGGCACTTCT ATGTTGCCAG GATTTCTCCA CAGATTGCTT GCAGAAATAA GGTATTTGGT      120
AGAAAAACCA AAATATAAAA AAGCACTTGG CACTAAGACA TTTCGAATTC ATACTCCACC      180
TGCAAAAGCT AATTGTGTGG CCTGGTTGGG AGGGGCTATT TTTGGAGCAT TACAAGATAT      240
ACTTGGGAGC CGTTCTGTTT CAAAGGAATA TTATAATCAG ACGGGCCGTA TACCTGATTG      300
GTGTTCTCTC AATAACCCAC CTTTGGAAAT GATGTTTGAT GTCGGGGAAC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:821:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```

GCTCGAGGGC GAAGGGGAGC AATGGCATT GCGTTGGCCA TCCGTGACAC GGCATCCTAT      60
GCTCGCCAGA TGATGTTTAC GACCACCCTT CTCATTGTGT TCTTCACTGT CTGGATCATT      120
GGAGGAGGCA CGACACCCAT GTTGTCTATG CTTAACATCA GAGTTGGCGT CGAGGAGCCC      180
TCCGAAGAGG ACCAGAATGA ACACCACTGG CAGTACTTCA GAGTTGGTGT TGACCCCGAT      240
CAAGACCCAC CACCCAACAA CGACAGACTC GAG          273

```

(2) INFORMATION FOR SEQ ID NO:822:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

```

GAGATAAACA AAATTGATTG CCCATTCTC TCACTTCCCC ATCTTGTCTT CCTAGACCCC      60
ACAGAGTTAA AACTTGGGAT TCCCCTGGCC CCCCCAGAAC ACTTGTATAT TGTTTGTGTTG      120
AGGTTTCGTGC CGCAGTAACA GACACAGTAT TTAATTGCAC ATACAGATGT TTGCTGGGTA      180
TATTCAGTGT AAATTTTATT TAATCTGTTT TTTTGTGTTT TTGGGGGTTA TTTGGGGGGA      240
GGTTGGTTTT GTTTTAAAT ATAAAAAAA AAATCTGTCA CTCGAG          286

```

(2) INFORMATION FOR SEQ ID NO:823:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

```
GGTCTGGAGG AGGCCCGGAG GGGCTGTGGG TGGACCACTG CAGTAATCTG GGTGAAAGAT      60
GATGATAGGC TAGACTAATA TGGTACCAGA GACAAAGAAG AGGGACTTGA GAGTTATTTA      120
GGAGGAAAAA AACAAAACAA AACAAAAATC AACCAGACTT ACGTTTTGAA ATAGGACAAG      180
TGAGGAAAAG GAGGGTTTCG AGAATAGCTT ATAGTTTTTCG AGAAGATGAG GTTGGACAAG      240
ATGCCACTGC TTTCTTAGC ACTCTTCCT CCCCTAAACC ATCCCGTAGT GCTCGAG          297
```

(2) INFORMATION FOR SEQ ID NO:824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

```
GAATTCGGCC TTCATGGCCT ACCCTCATTA CCCCAAGTGC CTCCTAATGG ATCTGTCCTT      60
ATTCTTCCTT GTTCTGTCTC CCTCATGCCC TGGAGCTCCT CTCTTTGGGA CCTTCCTCTC      120
CCAAGTCACC ACCCTCTCTC CCCTTCTACC ACTCAGCCAT TCCCCAGTTT CCACAGTTCC      180
TCAAACATTA CCCCACTCCC CACTCCCCAG TTTCTCCCC CTCCCCATT GTCCCCCTCA      240
CCTGGGGGTC CCCGAAGTAG ATCTGCAG          268
```

(2) INFORMATION FOR SEQ ID NO:825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

```
GAATTCGGCC AAAGAGGCCT AGATGTGAGC TGGGGAAGGG AGGGTGGCCA GTAATGGGTT      60
TGTATCAAG CAGGTTTGTT ATCACTGTGG GTGACAAGCC CCTTCCCAT TGGGGCCTCT      120
GGGATCCAGT GCAGAACATA TCCCTCGCAG GAGATGAGGA ACTGGGGTGT TCACAGAGTA      180
ATTCCCTCCC TCACTAGTTG AGGGCTGCCT CTGGGGGTGG CTGAACTACC TCATGCAGCC      240
AGAGAAAGTC CTCAGGCAAT GAAATACAGA CACTGGCCAG CCAGCACTGA GGTGGCGAGA      300
CCTTACTGGC TGGTCCCCAG AGTGTCTGCA GCATTGTGTG AGATCTTAA CTGGCTAGAA      360
GGACGGTAAC AGCAGCACCT GTTTCATAGG ACGTGAAGAT AGACGAGACA G          411
```

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

GAATTCGGCC	AAAGAGGCCT	ACTAAAACCA	TAATTGCTTG	TTTTTGCTG	TATCTGTCTT	60
TTCACGAACA	TTTGTAGTTT	AGCTCTGTCT	TACATTCCCA	TCCCTAAAGA	TCATCAGGAC	120
TTTTGTTTTT	GTGACAATGC	TGGGACCAGA	TTGGCCTTCA	TCATCTCATA	ACACCCTTAT	180
TTCTATGGA	AAAGTAAAAT	TGAATTATTC	CAGATATGAT	GACTTTAGGA	TATCCTTTTC	240
CCTCTGTAC	ATCCTTCATT	GTATTTGTGT	TTCCCTTTG	GTCTCCAACG	TCCCCACCAC	300
CCCCAATCCC	TCCACGACTT	TTAAGCCCTT	GGAAGCCAAC	TTGATTAGTC	AGG	353

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

GAATTCGGCC	AAAGAGGCCT	ACCGTGAGTT	CCCAGGGTGG	CCGGGAGGGG	GAGCTGCGGG	60
GTTACAGCG	GCTCCTCTCA	ACGTTCTTGG	CTCCGCTCCC	GACTTCTCAG	CCCTGCCTGG	120
AGGGGCTCAG	CCACTGCTTT	TAGCTGTCTG	CTGGCTTTCC	ACCCCTCCAG	CCTGAACCCT	180
GACTTCCCCA	TGAGGCCTTC	CTGTGGCGGG	GACACTCCAG	GTGCTGCAC	CCCTTCTCTC	240
CTGAATTTCT	GTAACGACAT	CTAACTTTTA	TTTAATTAAT	TTATTTATTT	AGAGATGGAG	300
TTTCTCTCTT	GTGCCCCCGG	CTGGAGTGCA	ATGGCACCAT	CTTGGCTCAC	TGCAACCTCC	360
GCCTCCCAGG	TTCAAGTGAT	TCTCCTGCCT	CGGTCTCCTG	AGTGGCTGGG	ATTGCAGGCA	420
CCCATCTG						428

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

GAATTCGGCC	AAAGAGGCCT	AAGCGGTATT	TCAGCCACAG	AGTTGGTGTT	GGGTTTACTT	60
ATCTATTTTG	AATTTAAAAG	GCTTATAAAT	AAAGCAGTGA	CACTGCTTAC	TGGGAAATGC	120
TGTACCAAAA	AATGTTATCT	TGCT				144

(2) INFORMATION FOR SEQ ID NO:829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 95 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

GAATTCGGCC AAAGAGGCCT AGCGGACTAG GAGTCAATAA AGTGATTGGC TTAGTGGGCG 60
 AAATGTTATG CTTTGTGTT TGGATATATC TGGAG 95

(2) INFORMATION FOR SEQ ID NO:830:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

GAATTCGGCC AAAGAGGCCT AGTGGCTACC TAAATTGAGT ATCTGGCAAG AGTAAGATTA 60
 AGCAGTAATT TGTTCCAAAG AAGAATCTTC TACCAAGGAG CAACTTTAAA GAATGAAATT 120
 AACTTTCTTC TTGGGCGTGT TGGCTCTTAT TTCATGTTTC ACACCCAGTG AGAGTCAAAG 180
 ATTCTCCAGA AGACCATATC TACCTGGCCA GCTGCCACCA CCTCCACTCT ACAGGCCAAG 240
 ATGGGTTCCA CCAAGTCCCC CACCTCCCTA TGAACAAGA CTTAATTCAC CACTTTCTCT 300
 TCCCTTTGTC CCAGGGCGAG TTCCACCATC TTCTTTCTCT CGATTTAGCC AAGCAGTCAT 360
 TCTATCTCAA CTCTTTCCAT TGAATCTAT TAGACAACCT CGACTCTTC CGGGTTATCC 420
 AAACCTACAT TTCCACTAA GACCTTACTA TGTAGGACCT ATTAGGATAT TAAAACCCCC 480
 ATTTCTCCT ATTCTTTT TTCTTGCTAT TTACCTTCCT ATCTCTAACC CTGAGCCCCA 540
 AATAAACATC ACCACCGCAG ATACAACAAT CACCACAAAT CCCCCACCA CTGCAACAGC 600
 AACCACCAGC 610

(2) INFORMATION FOR SEQ ID NO:831:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

GAATTCGGCC AAAGAGGCCT AGGAAGAAAC AAGAACAAGA AAAAAGATTA TATTGATTTT 60
 AAAATCATGC AAAAAGTCA ACTCTGTGTT TATATTTACC TGTTTATGCT GATTGTTGCT 120
 GGTCCAGTGG ATCTAAATGA GAACAGTGAG CAAAAAGAAA ATGTGGAAAA AGAGGGGCTG 180
 TGTAATGCAT GTACTTGGAG ACAAACACT AAATCTTCAA GAATAGAAGC CATTAGATA 240
 CAAATCCTCA GTAAACTTCG TCTGGAAACA GCTCCTAACA TCAGCAAAGA TGTTATAAGA 300
 CAACTTTTAC CCAAAGCTCC TCCACTCCGG GAACTGATTG ATCAGTATGA TGTCCAGAGG 360
 GATGACAGCA GCGATGGCTC TTTGGAAGAT GACGATTATC ACGCTACAAC GGAAACAATC 420
 ATTACCATGC CTACAGAGTC TGATTTTCTA ATGCAAGTGG ATGGAAAACC CAAATGTTGC 480
 TTCTTTAAAT TTAGCTCTAA AATACAATAC AATAAAGTAG TAAAGGCCCA ACTATGGATA 540
 TATTGAGAC CCGCCGAGCT CGAG 564

(2) INFORMATION FOR SEQ ID NO:832:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

```

GAATTCGGCC AAAGAGGCCT ANTCTGTTGA GATTTCCTCC TTTAGTTTCC AACCTTCTCC      60
CCACCTACTC ATTTATCCAT CCCTCCCACC AACTCATTTA TCCATCCCAC CCACTCATTT      120
ATCCATCCAT CCCACCCACT CATTATCTG TCCATCCCAT CCACTCATTT ATCCATCTAT      180
CCCACCCACT CATTATCTG TCCAACCCAT CCACTCACCC ACCTACTCAT TTATCCATCC      240
CATTGCTTA CCCATCCATC TATCCACCT AACAATACAT CCAACCATT CCACTCATTT      300
GCATCTGTCT GTTCAGCTGT TCATCCATTC ATTGATCTTT CCATCCATTC ATCCACTCAT      360
TCACACACCT ACCTACCTAC CCACCCGCTC ATTTATTCAC CCACCTACCC TCTCATCCAT      420
CCAG

```

(2) INFORMATION FOR SEQ ID NO:833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

```

GAATTCGCCA AAGAGGNCTA GTCTACATCA GCTAACTTTC CTACAAGATT ATCAAATTTT      60
ACACAGTATT TTTCTGTATT TAATGACTGC CATGGTCTGC AAAATTATGT GATTAGACAA      120
TGAATGACGC TTAAAGAATG ATGACCTATT TTCTAAAGTA CACTCAAAAT ATTAACTTT      180
AGAGACAAAG CAAAATCTAT CATAAGTTG GCTTCTGTTG ATAGAAACAG AGAGGTAGGT      240
TAATAATCAC TGTCTAAGA TAAGCNAGAA TGCTTAGAAA TAAAGTTGA GACCCTGCTT      300
CAAAAAAGAG AAGTTGAACC TTCCAGCCCT GAGTTCTAA TATTACATGA AAATTATGAA      360
AATGAGCATT AAGCCAGTCG CAG

```

(2) INFORMATION FOR SEQ ID NO:834:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

```

GAATTCGGCC AAAGAGGCCT ACTACGTAGT TGGAGCTNTT TCTTCCCCCA GCAAAGCCAG      60
AGAGCTTTGT CCCCAGCCTC CTGGACACAT AGGCCATTAT CCTGTATTCC TTTGGCTTGG      120
CATCTTTTAG CTCAGGAAGG TAGAAGAGAT CTGTGCCCAT GGGTCTCCTT GCTTCAATCC      180
CTTCTGTTT CAGTGACATA TGTATTGTTT ATCTGGGTTA GGGATGGGGG ACAGATAATA      240
GAACGAGCAA AGTAACCTAT ACAGGCCAGC ATGGAACAGC ATCTCCCTG GGCTTGCTCC      300
TGGCTTGTTA CGCTATAAGA CAGAGCAGGC CACATGTGGC CATCTGCTCC CCATTCTTGA      360
AAGCTGCTGG GGCCTCCTTG CAGGCTTCTG GATCTCTGGT CAGAGTGAAC TCTTGCTTCC      420
TGTATTCAGG CAGCTCAGAG CAGAAAGTAA GGGGCTTACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:835:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

```

GAATTCGGCC AAAGAGGCCT ACTGGGAGTT CGGAGTGATT GTTCCTGTT ACAGGCCAAA      60
AAATTTGTTT GGTACTTAG TGGTAGCATT TTGAGAGGAA AGTTTACAGA AACTAGGGT      120
TATTTTGTTG TTATGCTTGA ATTGTCTTAA TTGTTTCCAA GGCATCTTTT TTTTTCCTT      180
CTAGTTATCA AGATGTTAGG TTCTGTGCC TTGTGGGCCT TCCCTCTGCC CAAAAAAGC      240
ATGGATGAGC AGAGTAATAT CATTAAATG GCAGTCTTTG TTAGTTTTTC TAGAAAAGAT      300
GGTCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

```

GAATTCGGCC AAAGAGGCCT AAGGCAGGTT TTTTTTCTA TGCTTATTGA TTTAGCCTAT      60
CTATTTATAA CAGTATAATT CAGAATATAA ATATGGAACA AGTTTCATAA GGAAGTTTAT      120
CTTTAACTCA GACATTATAT CATTAACTCT TCAAATCTCA TTATACCATT ATGACCTGAA      180
TGCTACATTT TTCTTCCTGT ATGGAGAGCT TAGGGAAAAA TTGTGGCCTG ATGTCTTCAT      240
CCATTCACCT ATCATAGAGT ACATAATGAT CTCAAATATC CAAAATGGT TATATTCAGC      300
TGCATATTTT TAAGAAAACA GGCAGGACTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

```

GAATTCGGCC AAAGAGGCCT AATTGATTTC CCATGAGTCT TGTAATCTTT GCTCTGCTGA      60
TTGCGTTTGC CGTCTCTAGA CCATCTCGCT TCGAACAAAT CGCAAAAGAG GTGAATTCCA      120
GAAGAACGAC CTGGATTGCA GAAGAATCGG CTCCGTTCCTG TACTATGCT CGTTTGATCG      180
GTACCCTTCC AAATACGGTC CCTCTTCCGA GTAAGACTGT CGATGTCGTG AAGAACCTTC      240
CTGAGAGTTT TAACGCATTG GAAAAGTGGC CGGAATGCAA GTCCATCACG GAAATCCGTG      300
ATCAAGGAGA ATGTGCTTCA TGTTGGGCAC TGGGGAGTGG CGGAGGTGGC CACGGATCGT      360
CTTTGCATTT CTTCCAACGG AAAGGATCAA TCCCGTCTCT CTGCCGAGGA TCTGTTGGGA      420
TGCTGTGACT CTTGTGGAAT GAAATGCAAG GGAGGGTACA CGGGGAATGG CCTGGGAGTA      480
TGTACGTCAG GTGGGAATTG TGACGGGTGG AGCGAATGGA AACAAGGAAT GGTGTAATGA      540
GTACGCGTTC CCGAAGTGCA GTCACGGTAT TCAGGGCTCC TATCCTGAAT GCTCTTCCAT      600
CCCCCTGAA GATCCGGAGT GTTCAACGAC TTGCATAAAG GGTATCCCA TCCCATATGA      660
TCAGGACCGT CACAAAATGA AGTCAGCCTT CCAGCTGGCA CTCGAG                                     706

```

(2) INFORMATION FOR SEQ ID NO:838:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

GAATTCGGCC	AAAGAGGCCT	ATAAAAGTCT	TATTTTITAC	TTTGTCCT	GGAATACATC	60
ATCGTTGGCC	TATCATTCCA	AACTCCCTAC	AGTGTGGCTT	CAGCTTATCT	CTCTCTGTTT	120
TTTACAGGAA	TCCTAAACTC	TAACCCAGGG	ACCCTCAACA	TCTGTGCTGG	GTGGACTGTG	180
GCCACATTTT	CAGCTGGCCA	GTGTAAGGGT	TTTAGAGGCC	CTTACATGAG	AAGAAATACA	240
ATTTTAAAGT	CTCTGAGATG	ATGTGCTTCT	TACATTTTTG	GAATTAAAT	GCCTCTTTAC	300
TTATAAAATG	CTGGTAGTAA	TAGATGGTCA	TTATCTCACT	GTCATTTGTG	AAAGAAAAAA	360
CGATTGTAAT	AGAATTCTTG	CTATTTTTTT	TCTCTAAGGG	AGGTAAGTTT	TCTCCCTAAG	420
CAAACCTTAT	GGAATGCACA	ATGCTTGGCT	TTCACCTTCT	TTTATTCTCA	CTACCACCGG	480

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 589 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

GAATTCGGCC	AAAGAGGCCT	AGAATTAAGG	TGTATTATGA	GCAGTTGAAG	ATATATAGGA	60
AATTTTTTCC	CAAACCACTA	TCTCTGCTCG	TTCTATTTCAT	TCAGTCTGTT	TATGTTATTC	120
CTTCATTCAT	TCATTTTATA	GAACAGTGGA	GTGCCTACTG	TATGCATCTA	TTGTCTGGG	180
TCCTGGGGAA	AGAAAACAAA	GTTCTGCTT	TCATGGAAC	TACATTATAT	TGGCGGAGAC	240
AGTAACAGAC	AAACAAATGT	AGCCTGTGTA	CATGTGTTAC	ATGAAAAGCA	GGGTAGGGGG	300
CTGGGAGAGA	GTAGTAGGGA	GTGCTATTTT	CGAGGTGGTT	GTCAGGAAAG	GCCTCACTGA	360
GGAGGTGGCA	TTTGAGTAG	ACCTGAGCGC	AGCGGGGGCG	TAAGCCCAGG	CAGCATGTGG	420
AGGAAGAGTG	TTCTTGGTGA	AAGGAACAAG	GATAGAGGCC	CGAAGCTAGA	GAGCTCAGCA	480
TGATCAAGGA	ACAGCAAGCC	CCGTGTGGCT	GGAATGGAGT	GAGCAAAGGA	ATGAGCAGTA	540
GAAGGTGAGT	GAGTTGGGAG	GTCACCAGAG	ACCATGGCAA	AGACTCGAG		589

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 430 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

GAATTCGGCC	AAAGAGGCCT	AGGGACTAAC	TGCAACGGAG	AGACTCAAGA	TGATTCCTT	60
TTTACCCATG	TTTTCTCTAC	TATTGCTGCT	TATTGTTAAC	CCTATAAACG	CCAACAATCA	120
TTATGACAAG	ATCTTGGCTC	ATAGTCGTAT	CAGGGGTCGG	GACCAAGGCC	CAAATGTCTG	180
TGCCCTTCAA	CAGATTTTGG	GCACCAAAAA	GAAATACTTC	AGCACTTGTA	AGAAGCTGTA	240
TAAAAAGTCC	ATCTGTGGAC	AGAAAACGAC	TGTGTTATAT	GAATGTTGCC	CTGGTTATAT	300
GAGAATGGAA	GGAATGAAAG	GCTGCCCAGC	AGTTTTGCC	ATTGACCATG	TTTATGGCAC	360
TCTGGGCATC	GTGGGAGCCA	CCACAACGCA	GCGCTATTCT	GACGCCTCAA	AACTGAGGGA	420

GGAGATCGAG

430

(2) INFORMATION FOR SEQ ID NO:841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

GAATTTTAC TTGTCTATAG TCTAGTATTG TTATACCATG TGGTCTTGTT ATAATCATGG 60
TTTCATTCT GTGAGTCTTC AGATTATAGG CCTCTTTGGC G 101

(2) INFORMATION FOR SEQ ID NO:842:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

GAATTCGGCC AAAGAGGCCT AAATGGCGTC GTGGCATTGA GGGGCATCCC TCCTAGAACC 60
TCCAGGAAAA GCTCGCGGAA GACGAGGTTC TGCGGAGAGA GAGGCTCCAA GCAGTCTGGG 120
AAGTGTAGTC CAGTTGGCTT AGCAGTAGTT TCGTTGGGGG GGAGCCGAGG TTCCGGGAAG 180
GGGCTAGGCC GGCTTGAAAA GAGATTATGA CTGTACCTTT TAACTTTGTA GCTGGAACAC 240
AAGAAAGTGT TGTTTAATGA ATGACGTACA CATTAAAGAT CTGTTTGGAC GCGGAGGATA 300
ATCCTGTGAA TTGCTAATAG TTCACTGGGT TTGGCCCTTA GTTTGACTT CAGTATGCTG 360
AGACGGAAAC CAACACGCCT AGAGCTAAAG CTTGATGACA TTGAAGAGTT TGAGAACATT 420
CGAAAGGACC TGGAGACCCG TAAGAAACAG AAGGAAGATG TGAAGTTGT AGGAGGCAG 479

(2) INFORMATION FOR SEQ ID NO:843:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

TGGAAGAGCT AACTCGTCTG GCCTTTGAGC TCTTTGCTGA AGAGCAAGCA GAGGGTCCCA 60
ACCGCCTGCT GTACAAAGAC GGCTTCAGCA CCATCCTGCA CCTGCTGCTG GGTTACCCCC 120
ACCCTGCTGC CACAGCTTTG CATGCTGAGC TGTGCCAGGC AGGATCCAGC CAAGGCCTCT 180
CCCTCTGTCA GTTCCAGAAC TTCTCCCTCC ATGACCCACT CTATGGGAAA CTCTTCAGCA 240
CCTACCTGCG CCCCCACAC GCATCTCGAG 270

(2) INFORMATION FOR SEQ ID NO:844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 413 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

```
GAATTCGGCC TTCATGGCCT ACACAGCCAG TATCAGAACC TCAAGAAAAC GAGGACACTG      60
GGGACAGGGA CCAAAATTCA GACCACTTTT TTCTCTTGCC TTCAATAGG ATATTCTGTT      120
AATTGAATTC ATCTGAAAAT CAAGGTCATT GCAGAGAAGT CAGCATTCTA GAGCACAGAA      180
CAGGGCAAAA CAGGACGAAA GATGGATTG GAGACCAAAT GGAGAAGGAA GAACAGAGAT      240
ACGTGTGCTC CAAATATGAC ACCCAACTTC TTTACTCAGA GCAGTTACAT GTCAGATTAT      300
ATTTTAGTTT TTCATTCTC CTATAGGCAT ACATACTACA AGTCTATAAT AGAAAAC TAG      360
TGGCTGGGCG CGGTGGCTCA CGCCTTTAAT CCCAGCACTT TATGGCGCTC GAG      413
```

(2) INFORMATION FOR SEQ ID NO:845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 126 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

```
GAATTCGGCC TTCATGGCCT AGGCTCTGTC TACCAAAAAA AAAAAAAAAA GAAAGAAATC      60
TTGCAGTCTG AATACATGGT TGTGTTCTTA AGAAACCTGG TGATAACAAC GACAAAAC TC      120
CTCGAG      126
```

(2) INFORMATION FOR SEQ ID NO:846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

```
GCTTCATGGC CTAGTTGAAT AGTCAGTTAG AAATGGAAAG AATGAAAGTT GAACAAGAAA      60
GACAAAGCCT TAGAACAAAA GACACAGCCC TAGAACAGAA GGACAAGGCC CTGGAACCAA      120
AAGACAAAGA CTTAGAAGAA AAAGACAAGG CCCTGGAACA GAAGGATAAG ATTCCAGAAG      180
AGAAAGACAA AGCTTTAGAA CAAAAGGGCA GAGACTTAGA GCAAAAAGAC ACAGCCCTAG      240
AACAGAAGGA CAAGGCCCTA GAACTCGAG      269
```

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

```
GCGATTGAAT TCTAGACCCA CCTTCAGACC ATCTCGGAAG ATCTAAAAAG CCTGACCATG      60
GACCCTCACA AACTGCCCTC CTCAAGTGAA CAGGTGATTG TGGACTTGAA AGGTTCTGAT      120
TACAGCTGGT CGTATCAGAC GCCACCCTCT TCCCCCAGCA CCACCATGTC CAGAAAGTCC      180
AGTGTCTGCA GCAGCCTGAA CAGTGTCAAC AGCAGTGACT CCCGGTCCAG CGGCTCCCAC      240
TCGCATTCCC CCAGCATTCT CGAG                                     264
```

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

```
GAATTCGGCC TTCATGGCCT AGAACATTCC AAATTTTCTT GGTTC AATA CCCTTTTTTT      60
TCTTTTGAGG GGAAAAGAGG GGAGAAAAAC AGGAGTGATG TCATTTCTTT TTCATGTATT      120
CCAATTAAAG AAACAAGGGC AGTCGTATA ATGGCATATT AATACATTAG ACTTAATCTA      180
GAACCCCTGT AGCTTTTGA TGTGTTTAT TTCTTATCTC TTTGAATTCC TGTTTGTTA      240
CTTGGCTTCC AATGGAGGTG AACTTAACAA CCATACTGA ATATTCCGTC TTGACTTTGT      300
AAACTGTGGC TACTTGAAAT GAAGTTTATC TGGGGTCTCG AG                                     342
```

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

```
GAATTCGCCT TCATGGCCTA GGTTATTCTA TTATTTGTAG CTGAAATAAT TCCTGGCACA      60
AATGACTTTG AAATTTATCT CTGAACATCC CAAATTCATT ATTAGCAAAT ATCAGAAACT      120
TCACATCACT CCAGTCTGTT ATTTACATG GTTTTCTTAG GGCCTGGAAA GTTTTACAG      180
CTGGCTTTTA TTGACTGTGG TGGCTGATAT GCTGAAGAAT GGAGCTCATT GGTTTGAGGC      240
TTCTGCCAG                                     249
```

(2) INFORMATION FOR SEQ ID NO:850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

GAATTCGGCC	TTCATGGCCT	AGACATGAAT	TCTTTGACTT	GTGCTCATTC	TTTCTGAACT	60
TATTGAGGCT	TATATATATC	AAATAAGGTT	AATTTACACA	ATAATTATTT	TTAATAATTA	120
ATAAACTCAT	TCATGTAGTA	TATTTTAAAA	CATTATTTCC	TCTCATTTTT	CCTTCTCTTT	180
TTTCTTCCTA	TATATTTTTA	AGGTTTCAAG	AGAAAACGGG	CTTCAGTTTT	TAAAAAAATG	240
TAGACTTGCA	TTTTTACTGT	GCTTATTTAA	AATAATGGAT	ATAATTTATA	TTAAGGTCCA	300
AATTATTTTA	TTCACAGGAT	AATCATGGTC	TCTGATAAAA	GATGCCCACA	TTTCTGTGTA	360
CTCACAGTTG	TTGTATATTT	TTCAATTTCA	ATTTTGAAAG	TAAACTCAAC	ACTCGAG	417

(2) INFORMATION FOR SEQ ID NO:851:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

GAATTCGGCC	TTCATGGCCT	AGCTAGCTAT	TGTAAATACA	AATAATAAAG	TCTGCATTTC	60
CTGTCTTCTT	TAAGCCTTCA	TTGCCTATTA	AATCATTACA	TTTTAGATTA	GATATTATAT	120
TTTGATCATT	TGAGGAACCA	AATTAAAAAT	ATGGAATAAG	TATGGCATTG	AATTATACAT	180
GCCTATTGCT	AATATATTCA	TATTTTATAG	GATTTAATGA	AACAGTCTCC	CAGCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:852:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 489 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

GAATTCGGCC	TTCCCTAGGA	AAGTTCTTCA	CATCAGGAAA	CATTAGATCA	TATACAGAAA	60
CAAACTAAAT	TTGATAAAGT	AGTTATGGAG	TTTTTGCAATG	AGTGTATGGT	GAATAAATTC	120
AAGAAAACAT	CTATTCGTAA	GCAACAGACA	AATAATCAAA	CAGAAGTAGT	TAAAATAATT	180
GAAAAAGATG	TTATGGAAGG	TGTTACTGTA	GATGATCACA	TGATGAAGGT	AGAGACAGTT	240
CATTGCAGCG	CTTGCAGTGT	GTATATCCCT	GCTTTACATA	GTTCAAGTTCA	GCAGCACTTA	300
AAATCTCCTG	ATCATATCAA	AGGGAAGCAG	GCTTATAAGG	AACAAATAAA	AAGAGAGAGT	360
GTCTTGACTG	CTACAAGCAT	TTTAAATAAT	CCAATAGTGA	AGGCGCGATA	TGAACGTTTT	420
GTTAAGGGTG	AGAATCCTTT	TGAAATTCAA	GACCATCTC	AGGATCAGCA	AATAAAAGGC	480
AGACTCGAG						489

(2) INFORMATION FOR SEQ ID NO:853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

```

GAATTCGGCC TTCATGGCCT ACTTCACTAA CCTTTTTTGT TTAAAAATGA ACCTGCTACT      60
TAAAAAAAAT ACACATCACA CCCATTTTAA AGTGATCTTG AGAACCTTTT CAAACCAGAT      120
GGAGCATTGC TTGCAAATTT TTTTCTCTA TGTTCGATG CGCTCGTGTG TGTGTGTCCA      180
GGCAAGAACA CATTTTATAA AAATAAGAAC ACTTGGGCTG GGCATGGTGG CTCATGCCTG      240
TGATCGCAGC TCTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:854:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 217 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

```

GAATTCGGCC TTCATGGCCT ACACAGCTGC AGTCAACATC CACAACTACC GGGACCACAG      60
CCCCTACTGC TGGCTGGTGT GGCCTCCAAG CCTTGGCGCC TTCTACATCC CTGTGGCTTT      120
GATTCTGCTC ATCACCTGGA TCTATTCTCT GTCGCCGGGC TACGCTTACG GGGTCCTCTG      180
GCACAGAACC CCAAGGCGGG CAACAGCAGG GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:855:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

```

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAAAATAAA TAAATAACCC ACAGAGCTGA      60
GCACAGGCTT CTTTCATGCTT TTCCTTTGGA AGGTGTCCTA GATATATGAT GATTTCTTTT      120
TTCTTTCACC TCCTCTTGAT TGTCACAAGT AGCTTGCTTG GCTCAGGAAC AACAGAAGAG      180
AATAAAGAAA ATGACCTCAG ACCTTCCTTA CCTCAGTCTT ATGCAGCGAC CGCAGCCAGA      240
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:856:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 334 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

```

GAATTCGGCC TTCATGGCCT ACTGTCTCAA AAAACAAACA AACAAAAAGA AAGAAAGAAA      60
AAGGAAAGGT AGACTTATAT AAAATAGACA GTAAAGCATA GGCAGCAGA AAGGAAACC      120
TACTCCGCAA AAGTCACTTG TTTAACCTC ATCCAGGAGC TTCCTCTAAG TTCACCTTTA      180
TTTTTCACAC GTCCTGGGTC CAAATCCCAC CATGCTCTGC CGTATTCTTG CCCTTTGCTC      240
TGTTGTTGAA AGAGTCATGA GCGAGGCCTC TCTATGGATG GTTCCAATGA GCCACATGAA      300
CAAAGCCATC GTCAGTAAGC AGCCACTTCT CGAG

```

(2) INFORMATION FOR SEQ ID NO:857:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

```
GAATTCCTACT TGATCAACTT AATTCCTTTT CTTATCTTC CCTCCCTCAC TTCCCTTTTC      60
TCCCACCCTC TTTTCCAAGC TGTTTCGCTT TGCAATATAT TACTGGTAAT GAGTTGCAGG      120
ATCCTCGAG                                     129
```

(2) INFORMATION FOR SEQ ID NO:858:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

```
GAATTCAGC ACCATAATTT GGCCACTCAG CTGTCATCAG GAACTAAGCC AACATTCCTT      60
TTCAGAAAAA GACTTTGGAG AGGGGCAAAC ACTTCTGACA GTCATACTGT GTACTTATTT      120
TAGAAAATAA GCTGCTCTCA GGCTTCAGTA TCCAGTCAAA TATAATATAG AACTCTAGTC      180
TGTTTGGAGT CCTACTACAA TAATATTTTC ACAATAGACT ACCAGTTATG AAGTTCTCAC      240
ATTTTCCCG CATGCTCGAG                                     260
```

(2) INFORMATION FOR SEQ ID NO:859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 217 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

```
GAATTCCTGT CCCACCTGCT GAATGAGTGC GTGCCAGCTG AACATCAGCG TGGCTTCGTT      60
CTTCAACACA TTTACAAAAG AAGTAAAAAT AAACAGTTTT TTCTTCTCAA TTCTCCTCCC      120
TGCTTTTTTC CTTTGAACC ACAATCATGC CCCAGTAAGT GCTTTCCTAG GTGAGAGGTC      180
TGTGTCCCG GTTGAAGCA AGGCCAGTGG TCTCGAG                                     217
```

(2) INFORMATION FOR SEQ ID NO:860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

```
GAATTCGGCC TTCATGGCCT AGAATATTTT TATCATCCCA AAGCTAAAAC ATTAAAAAAT    60
TTAAAGTTTA TTCTTAGAGA TTGATGCAAC TTGCATATCT AATCGAG                    107
```

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

```
GAATTCTAGA CCTGCCTCGA GGGCATCCTT TACTTTTTTT TTTAATTCAG CACAAACCAA    60
ACAAAATTTT AAAATTTGAT GAGATTTGAA GTTGGACAAA AGTGTATGTC AGTTTTAAAA    120
ATTTTTTTTT TTTTTTTTGA GACCAGATCT CACTCTGTTG CCCAGGCTAG AGTGCAGTGG    180
CATGATCTCA GCCCAAACCT CTACCTCTTA GGCTCAAGCG ATCCTCCCAT TTCAGCCTCC    240
CAGGTAGCTG GGAGGCTGAA ATGGGAGGAT CAACTCGAG                    279
```

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

```
TGTATTTTTA CGTGACCTGT TTTCCAGAAT TTATGATATT TCTATGGTTG GTATTCTCAA    60
TTTTGCAAAT GTGTCTTGGT GTGGAACTTT TTCATTGTGT TTGCTGGGGA ATTGATGGAT    120
CCTTTGCATC AAGATGCTTA TATTTATTCT TCAGTTCTGG GAAACTTCCC TGTATTATTT    180
GTTTGATAAT TGCTTTCTCT CTGCTTCTC TTTTCCGTTT TTTGGAATTG CTGTTTGTG    240
TGTTGCATTA CTGCAGAGAA CTCGAG                    266
```

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

```
GAATTCGGCC TTCATGGCCT AGTGCTGTGG TAGTTTGTGC CTTTAGAGGG ATTTGTGTAT    60
CTCATATAAT TTAATTTTTT GACATTCAC TTTTCACAAT ATTCTGTTAG AATTCTTTTA    120
ATTCTGTAA GGTGATATCT ATACTTTCAT TTATGTCTAG TAACTTGAAT CTTCTCTCTT    180
```

TTGTTCTTTC TCGGTCAAAC TAATAATACG TCAATTTTAC TGATATATCA GAAGAACCAA	240
CTTTCAAGTT TATTAATTTT CTCTATTGTT TTTATTTTCA CTACTTATCT CCATGCTAAT	300
CTTTATTATT TCTTCCTTCT GTTACTTTG GGTAAAGTCT GCTCTTTCAC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:864:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

GAATTCGGCC TTCATGGCCT AGCTTACTTT ACAATTCTGC TGTTTGTCAG GTGTTCTAT	60
AGTTTTTTTT AAAGGTATGT TAACTATTTT TCCCTTTTGG TTTATATTG TAGGAATCTT	120
TGCCTTTAAG TGTGCCCGTG CAGAAGAATT ATTTAACATG TTGCAAGAGA TTATGCAAAA	180
TAATAGTATA AATGTGGAGC TCGAG	205

(2) INFORMATION FOR SEQ ID NO:865:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

GAATTCGGCC TTCATGGCCT AGTCACTTGT TCTGTAGAAT ATGTTCAAAT CTGATTTTGT	60
CTTTTTGTTT TCTTGTGTTA TTACCTTGTT CCTCTATCCC CTGTTTTTTC TGAAAATGAA	120
AGTTAGCTTA GAAGTTTCAT TCCATTCTGG TTCAAAATGC TTAAGTGCTT TATGTCGTGT	180
CATATTAGGA AACACAGTAT CTAGTGGTCC CAATTTTAGT GATTCAAAAA TCAGTCTCTA	240
GGTTCAGAGA TTAATCAGTA GATTCAGAGA TCTCTCCATT GTAAATTCT TAATTAACCT	300
TTGAATTGCT AATGTTCTGT TCACTGATCG TTGTGGCCCA AATTATTTAT TTCACTAGGG	360
GACTCGAG	368

(2) INFORMATION FOR SEQ ID NO:866:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 144 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

GAATTCGGCC TTCATGGCCT AAGGAGCAGC AGGAACATGG TACATAAAAT CATCCTGCTT	60
CTTATAATGG CAGGAATCAG TGGGATATGG TATTTGTGCA GCATGCTGGG GCATCCACTA	120
GAAAGGCCTG AAGGAAGACT CGAG	144

(2) INFORMATION FOR SEQ ID NO:867:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 268 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

GAATTCGGCC	TTCATGCGAT	TGAATTCTAG	ACCTGCCTTG	AGCCCCTCCA	CCCCCAAATC	60
CTTCCTCTCC	TCCCAGTCCC	ACCCCTTGCC	CCACGGAGTC	CTGGGGACGC	AGTGCCCCAG	120
CTGGGAAGAG	GGCGGGATCG	GGCACTGGTT	CCTCCTTGTC	CCCCTTTTCT	TGGGGGCTTG	180
CTACTTTTTC	TCTTCTATTG	TGTGGCTTTC	TGAGTATTTG	AACCCAGTC	CTGTGTCACC	240
TTCCTTTTTC	CTTCGCTGTC	CCCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:868:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 384 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

GAATTCGGCC	TTCATGGCCT	ACAGAACTAT	AATTTATCTT	AGTTTAAGCC	ACTGGTAAGT	60
GTAATTGTAA	TTGTAATTG	TTACATCTGC	TATAGTGAAA	CTAATACTGA	AATTTAGAAA	120
AGATGGGTAA	CTTATTATGT	GGTGAAGTTT	AAAAAAGATA	AGTAACTCGT	TGAAGATCAC	180
ATAATTAGAA	AAGAAAGCAG	TAGAGCTTGG	CCTTGAAGTC	AACCACTGTG	ACTCCAGAGC	240
TTGTAGAACA	GAATAACCAC	CTCCAAGGCC	AGCTGAATCT	GACCACAGTC	TGGTGGAATT	300
CTAGTACATC	TCGTTGAGAA	GTGGGATTGC	CGGAGGGGAG	TTGGTTATTC	ATGAAGGTGA	360
TGATGTTTGT	CCAATGTCCT	CGAG				384

(2) INFORMATION FOR SEQ ID NO:869:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 273 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

GAATTCGGCC	TCATGGCCTA	CTTGGAGAGT	TTTGTAAGGA	GAGTGGCAAA	CATAGCACGG	60
ACTAATGCCA	CGAACAACAT	GAATCTAAGC	CGAAGCAGCA	GTGATAACAA	CACTAATACT	120
TTGGGGAGGA	ATGTGATGAG	CACAGCAACT	TCTCCTCTTA	TGGGTGCTCA	GAGTTTCCCT	180
AATTTGACCA	CACCTGGTAC	TACATCAACA	GTGACTATGT	CAACATCCAG	TGTTACTAGC	240
AGCAGCAATG	TAGCTACAGC	AACAACACTC	GAG			273

(2) INFORMATION FOR SEQ ID NO:870:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

GAATTCGGCC	TTCATGGCCT	AGGTCAGGAG	CCTTCTTGGG	GTCCCAATTC	TGCATCCCCA	60
AATGATAAAG	ATGGGGTGAA	GGAAGTGAAG	GCCATGAGTT	GGAGAGTCCT	CTTGCTTGAG	120
GTCCCTGAGA	ATGTGGTCCC	GGAGTATCCG	GATCACTGGA	AGCCAGGACT	TCAACGCATT	180
GGGTAGTGAG	GGATGGAGGG	AGGGGCTGGA	CGCAGAAGCA	GGATGAAGTC	TGCTGGGTGT	240
GAGCCTCCAA	GGAGGTAGAA	CAAAGAGGGC	AACTCGAG			278

(2) INFORMATION FOR SEQ ID NO:871:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 270 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCGGCC	TTCATGGCCT	ACCAGACTCC	CATAATAATA	AACCCTGGTA	ATAAACAAAG	60
GAACTCCTTC	CAGTTTCAGT	GTATCAACCA	CCACGTACCA	GATAAAATCT	TATTTACCTT	120
TTCACAATTT	ACCAGTGTG	GGCTGTGAAT	TAATATTTTT	ATTTTCTGT	GCATTCTATA	180
ATTAAGATTA	TTTTATTGTA	TTGTAAGTGT	AATTTTGAGA	CTAAAGTCTA	AAAACAAGAC	240
ATCATGAAAT	GGAGCTGGAG	GATACTCGAG				270

(2) INFORMATION FOR SEQ ID NO:872:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 339 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GGTTTAGAAA	GGGCACAAAC	AGTGCAAACC	TGTTTCATGAA	CCTTTACATG	TCATGAACAG	60
GGCAGAATGC	TTCAGGAAAG	AATTGTGCGAA	AGTAAAAAAG	CAAATAATGG	ATGCAGCTTA	120
TTCTAGTTAT	TGAAGAATCC	AACGGGATGG	AAGCTAAATG	TAGCACATGG	CATGGGCGAT	180
GTCTCAACAG	TGAGTGGGAT	AACAAGTCGT	TTTAATGGTT	CAGGGCCAAT	AACCGGGGAG	240
GGTGAGGAAC	GGCATCTCTG	TTTTGAGTAA	ACAAGAGTGA	TTTCCTTCCC	TGACACTGAA	300
AAATGAAACC	TTTGGGGAGA	TAGAGGAAGC	GATCTCGAG			339

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 245 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC TTCATGGCCT AACCTTTAAA CCCTAAAATC CAGGAAAAGA AAATAAATAC	60
ATTATCATGG ACCTGAGGGA TTTTACCTG TTGGCTGCTC TGATTGCCTG TTTAAGGCTG	120
GATTCCGCAA TAGCTCAAGA ACTTATTTAC ACTATTAGAG AGGAATTGCC TGAAAATGTG	180
CCCATAGGAA ACATACCAA GGATCTGAAC ATTTCTCACA TCAATGCTGC CACAGGGCCA	240
CCTCG	245

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

GAATTCGGCC TTCATGGCCT AGTTTCTTC ACTGGCATTG ACAAATTTAA GCCATTGCTG	60
CCTCATTAGC CTTGTATTTT GTGTGCATAT CATATATCCA GACCTGTATG TTCACTTTAA	120
GCAATCTTAT ATCACACTGT CTCCTCATCT ACCATATGGT AAATGTTAAA ACTCCACATT	180
TGTCTGCATC AGGGAAAATG CATGGGCACA CATCCTCCCC CCCTTCCTC GAG	233

(2) INFORMATION FOR SEQ ID NO:875:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

GGACAGGAAG TCAACTTCAA GCAGATTGAC TTGAAACGGG ATCTCATTTA GGAAGCATAA	60
GTGTCCAATC AAAAAGTGTG TATTTTTTTA AATTGGAAA ATACTCAAGT TCCAGTTGCT	120
TATCATTCTC CTTCACTTTC TGAAAACCTG GCAATCCCAT GTGGACTTCT GGTAGAATGA	180
GCAATGCAAA GAACTGGCTT GGAATTGGCA TGTCCTTGTA CTTCTGGGGG CTGATGGACC	240
TTACGACCAC CGTTCTCTCG GACACCCAC ACCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:876:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

GAATTCGGCC TTCATGGCCT AGTCCTCAAA TTAGTTATTG CATTATTTTC AAGTATTGTA	60
TTATCATTTA TTGATATTGG TAGTGTTCCT TAAACAGGA AATACATAAT TTGGCATCCT	120
TATTCCTAGT TTTATACCTA AAGAACCTAG TAACTCACAG GAGAACGTAG TAACATTATC	180

```

ACTTGTTAAT CAAGCTTTCA GTGAAACAGT TTATCAAACC ATTTTTTTTA TTTTGATTCA      240
GCAAATTTGT CAACTAAATT TAATTTAAAA GTAGAGGTCC AAAGCTCGAG      290

```

(2) INFORMATION FOR SEQ ID NO:877:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

```

GAATTCGGCC TTCATGGCCT ACTCAAATTG GAAAGAAAGA TTCCTTGAGA CTTACTTTTA      60
AAATCTAAAG TGTGAGGNN A ACANCAGAGT AAAGNCCAGA CTCATTNNAC CTTGATGTC      120
TGCATAGATC CAGNAGTTGT ACATTTTACC TAACAACATC ACTTTTGTG AACATTCCAA      180
CTCCAGAATG ATCCCCAATC ACCCTAATCT CAGAATGCTG GAATGATGTC TGTTGGCAAA      240
CCCAGGACTC CAACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:878:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 180 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

```

GAAGCGACCA TTCGTCCAAC AGGTATGGCT GGTTTTTGTG CAATGAGAGA ATGTCCACTC      60
GCAATGATGA GCCTGAGAAG GCAAGTCGTC CGTTTGATGT GGATCGCGAT GGTTTTGTTA      120
TGGGTGAAGG TGCCGGGATT CTTATTCTGG AATCACTCGA ACATGCTGAG AAACGTGGAG      180

```

(2) INFORMATION FOR SEQ ID NO:879:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 497 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

```

GAATTCGGCC AAAGAGGACT ACACAGAGCC CCTGTTTGGG AATTTGAGAT TCTGTGTCAT      60
GCTGGTTTTT CTTTCAGAAT TGCTTGAAAT CGAGTTCTCT TAGCCACTGG ACACCTAGTT      120
TTCAGGAGAA TGTCCAAGA TTGTTTATAT ATACAAAATG GCAAAAGTAC TGTTTTTCGA      180
ATTGATAATT CAAGCAAAGG CTTCTCTTTA CTGTCACTGA TTTTTTTTGT TTTTATTTT      240
GTTTCCTTGT TTCTATTTC TTGAAGCTTT GAAGGGAGGA GAAGCAGAAA ATTTTGTTTA      300
TGTTTGTTAA AAATCAGAAC TACTTAATGC TTTTGCCAC AGCATATTTC CTTGCCTGTT      360
GGAGCCGTTA GGAAGATTAC CTATGTCCTA ATCTTCAACC TGAGAAGATT TTTGACTCTT      420
GTGTCTACTG TTGATTGTTT GCTTGAGTTC TCAAAGACCT GTGGCCAGGT ATTTTAAAAA      480
GTCGTCTATT TCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:880:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

```

GAATTCGGCC AAAGAGGCCT AGCAAAATCA AATTCAACCC ATGAGTCACA GTGCTTTCTT      60
CAACAAGAAA ACATTGAACA CAGAAAGCAA TTGTGAATAT AAGGACCCTG GGAAAATGAT      120
TCGCACGAGG CCCACCTTG CTTCTTCACA GAAACAACCT CAGAAATGTT GCTTATTTAC      180
AGAAAAGTTT AAGCTGAACC TAGAAGTGAA CGGTGAGAAT GAAAGCAATG ACACAGAACA      240
GCTTGATGAC GTTGTGGGT CTGGTCAGCT ATTCAGCCAT AGCTCTTCTG ATGCCTGCAG      300
CAAGAATATT CATAAGGAG AG                                     322

```

(2) INFORMATION FOR SEQ ID NO:881:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

```

GGCCCCACCTG TGTCTGGTT GAGGGTCTCC AGGGTTCTTT GGGGCCCCGAG GCCAATGGTG      60
GCAGAGTCTA CATAGAATA TGCTTCGTGG TGTCTGGGG AAAACCTTTC GACTTGTTGG      120
CTATACTATT CAATATGGCT GTATAGCTCA TTGTGCTTTT GAATACGTTG GTGGTGTTGT      180
CATGTGTTCT GGACCATCAA TGGAGCCTAC AATTCAAAAT TCAGATATTG TCTTTCAGAA      240
AAATCTTAGT CGACATTTTT ATGGTATCCA AAGAGGTGAC ATTGTGATTG CAAAAAGCCC      300
AAGTGATCCA AAATCAAATA TTTGTAAAAG AGTAATTGGT TTGGAAGGAG ACAAATCCT      360
CACCCTAGT CCATCAGATT TCTTTAAAAG CCATAGTTAT GTGCCAATGG GTCATGTTTG      420
GTTAGAAGGT GACAATCTAC AGAATTCTAC AGATTCCAGG TGCTAGGCCT CTTTGCCGA      480
A                                     481

```

(2) INFORMATION FOR SEQ ID NO:882:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

```

GAATTCGGCC AAAGAGGCCT AGGGAAGAGT GGAACAAAAG TCAGTCGTAC ATTCAGCTAC      60
ATCAAGAATA AAATGTCTAG CAGCAAGAAG AGCAAGAAA AGGAAAAAGA AAAAGATAAG      120
ATTAAGGAGA AGGAGAAAGA TTCTAAAGAC AAGGAGAAAG ATAAGAAGAC TGTCACGGG      180
CACACTTTCA GTTCCATTCC TGTGTGGGT CCCATCAGCT GTAGCCAGTG TATGAAGCCC      240
TTCACCAACA AAGATGCCTA TACTTGTGCA AATTGCAGTG CTTTGTCCA CAAAGGCTGC      300
CGAGAAAGTC TAGCCTCCTG TGCAAAGGTC AAAATGAAGC AGCCCAAAGG GAGCCTTCAG      360

```

GCACATGACA CATCATCACT GCCCAGC

387

(2) INFORMATION FOR SEQ ID NO:883:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 443 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

GAATTCGGCC AAAGAGGCCT AACGCAGCCA TGGCTCGTGG TCCCAAGAAG CATCTGAAGC	60
GGGTGGCAGC TCCAAAGCAT TGGATGCTGG ATAAATTGAC CGGTGTGTTT GCTCCTCGTC	120
CATCCACCGG TCCCCACAAG TTGAGAGAGT GTCTCCCCCT CATCATTTTC CTGAGGAACA	180
GACTTAAGTA TGCCCTGACA GGAGATGAAG TAAAGAAGAT TTGCATGCAG CGGTTTCATTA	240
AAATCGATGG CAAGGTCCGA ACTGATATAA CCTACCCTGC TGGATTCATG GATGTCATCA	300
GCATTGACAA GACGGGAGAG AATTTCCGTC TGATCTATGA CACCAAGGGT CGCTTTGCTG	360
TACATCGTAT TACACCTGAG GCGGGCATAA CACAGCAAGA CGAGAAGACC CTATGGAGCT	420
TTAATTTATT AATGCAAACA GTA	443

(2) INFORMATION FOR SEQ ID NO:884:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 353 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

GAATTCGGCC AAAGAGGCCT AAACATCATT TGTACTCTAA TCCAATCAAA GAAGAAATGA	60
CTGAGTCTAA GTTCTCTAAG TACTCTGAAA TGAGTGAGGA AAAACGAGCC AAACCTCGTG	120
AAATTGAGCT CAAAGTTATG AAGTTTCAGG ATGAATTGGA ATCTGGGAAA AGACCTAAAA	180
AACCAGGCCA GAGTTTTCAG GAGCAAGTAG AACACTACAG AGATAAACTT CTTCAACGAG	240
AGAAAGAGAA AGAGTTAGAA AGAGAACGAG AAAGAGACAA GAAAGATAAA GAAAAATTGG	300
AATCTCGCTC CAAAGACAAG AAGGAAAAAG ATGAGTGTAC TCCGACAAGG AAG	353

(2) INFORMATION FOR SEQ ID NO:885:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 475 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

GAATTCGGCC AAAGAGGCCT ACAATTTTTT GCCTTTTAC CCTTCTGTCC TTTAATGCCA	60
TCTCTTTCTC AATTATTTTC TCTATTTT TTTCTGAGCA GACTTATACA AAAAGGAACA	120
TAAATTAAAT TTGCCAAATA TCAAAAGAGA GGAACTTTTT ATTTTTTATT TTTTGGAAAC	180
GGAGTCTCAA TCTGTCTCCC AGGCTGGAGT GCAGTGACGC AATCTCAGCT CACTGCAACC	240
TCCGCCTCCC AGTTCAAGAG ATTCTCTGCC TCAGCCTCCC GAGTAGCTGG GATTACAGGT	300

ACCCTCTACC ATACTCAGCT AATTTTGTGTA TTTTGTAGTAG AGACTGGTTC ACCATGTGGG	360
CCAGGCTGGT CTCGAACTCC TGACTTCAGG TGTTCTGCCT GCTTTGGCCT TCCAAAGTGC	420
TGGGATTATA GCGGTGAGCC ACCACTCTCC ACTGAACTTT TTAATCTTAG AGCAG	475

(2) INFORMATION FOR SEQ ID NO:886:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

GAATTCGGCC AAAGAGGCCT AGGGGTGTTA ATTAGCTCAG CTGTAGCAAT CATTTCATAA	60
TGTATATCAA AACATCCAC TGTATACTTT ATACTTTTTT ATAAAAATAA ATATTCTTAC	120
AAAAGGACAG GCGCTGTGTC TGTCTGGCTC ACCATTGTAC CCAATACCCA ACAGGGTGCC	180
AAGTACCCAA TACCCAACAG GGTGCCAAGG AACACAAAAG GCACTCAAAA TATGTTTGT	240
GATTGGAGTT TACAAGGAAG AAAGGTATTT TCTTATCCCT CTCTTCCCTT CCCACCCAAA	300
CATAGCTTCT TCTAAGAAAA GAACTGAGG CTGGGCAAGG TTAAAAGCTA GCTCCTGGTA	360
CTTTTGCATC CACTCTCAGT TTACCTGTGC CTTAAACCAG ACTTCATCAA ACTTCAGTCT	420
TCACAAGTCA CTTCAACATT TTTGCTCTAC CTAATTACTG CCTGTGTAGG CCTCTTTGGC	480
CGAG	484

(2) INFORMATION FOR SEQ ID NO:887:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

GAATTCGGCC AAAGAGGCCT AGTGGGACAT AAGGCTGGAA GGTAGCACAC ACAGCACCAT	60
ATTCTTTTTT ACTTGCATGC GAGTTACTTT GAGTGCTTTT CTCTTTACCA AATATATGAG	120
TTCTATTACT ACATTCTTT TCTTTGTTG TTTTAGTGAG ACAGGGTCTC GTTCTGCCTC	180
CCAG	184

(2) INFORMATION FOR SEQ ID NO:888:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

GAATTCGCCC AAAGAGGCCT AGTTTGCAGC TTAATTTTAA TTCAAATCA GCTGCAGATG	60
TTTGGGAGCC TTCTCGAG	78

(2) INFORMATION FOR SEQ ID NO:889:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

```

GAATTCGGCC AAAGAGGCCT AATGGAAGAT ATGCTGAAAG ACTTTCTCCT TGGAGAACAC      60
TTATTATTGG TTGGCAACCA GGGTGTAGGA AAAACAAGA TTGTTGACAC ATTCCTTCAC      120
CTGCTCAACA GACCCCGAGA ATATATTGAG CTACACAGG ATACCACAGT ACAAACCTCT      180
ACGCTTCAGC CTTCCGTTAA AGACGGACTT ATTGTATATG AAGACTCACC TTTGGTTAAA      240
GCAGTAAAGT TGGGTCATAT TCTGGTAGTA GATGAGGCTG ACAAAGCTCC AACAAATGTC      300
ACGTGTATTT TAAAACTCT AGTAGAAAAT GGAGAAATGA TTCTAGCAGA TGGAAAGACGC      360
ATTGTTGCAA ATTCTGCTAA TGTGAATGGA AGAGAAAATG TTGTAGTGAT TCATCCTGAT      420
TTTAGGATGA TTGTTCTGGC AAATAGACCT GGATTTCTCT TCCTAGGCAA TGATTTCTTC      480
GGTACCTTAG GTGATATTTT TAGCTGCCAT GCAGTTGATA ACCCAAACC CCACTCGGAG      540
CTCGAG                                         546

```

(2) INFORMATION FOR SEQ ID NO:890:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

```

GAATTCGGCC AAAGGGCCTA GAGATTTCAT GTATTTCTCT TCACTCCAA GAGAGTGGAT      60
AGAATGGAGA AATCTAGATT GATCTTTACA GCTCCAGATA AAGGGACTAA AAATATTGGT      120
TTAAAATATT AAAGGTTAAA GAAAGAGACT GTTGGTTTCT TTCAAAGTGA TTTAAATTTA      180
AACTAGGTTT TTATTACTAA GTTTTGGAAA TGGGGTAACC ATTTTCTCT CATATCAAGG      240
ATATGTACAT ATTTCCCAT TCCCCATAAT TAAAAACAAA CAACTCCCAT CCACTTCTTA      300
TAAATAGTTC TTAAGTTGGG CTTAGTAACA ATGTATATTG TGCCAGTAAT ACAGAAAAGG      360
TGGGAGTATA AAGACCATCC TGTCTGTGTA GAATCCTATA GAACCAAGGT GCTGGATTAT      420
GGTGGTT                                         427

```

(2) INFORMATION FOR SEQ ID NO:891:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

```

GAATTCGGCC AAAGAGGCCT AATTTTATTG AAAGTCTTGA TGTATGTCAA AGGAGCCCAC      60
AACTTCAGCT ACACAACTTT TTGTATTGAA AGAACTCATA CTTTTGTAG CTTTATTTC      120
ACATTTAATT TAAAGTGACT TTTAGCACTA AAATGCCTAG AAGATTTTAC TCCAGACCTA      180
TAAGGAAATG TTTAGTTTTT ATGAAAAATG ACAAGTCGAT GGTTAACTT CTCATGTCTT      240
TGGTGCCTTG GCCCTAATAG CACTGGACAA CACCACGACC ACATGGAAAC ATATTTTTTG      300

```


AAGCAAAACT TTAATTTTAT ATAACGTATG CTATGGAGAA CTCGAG

346

(2) INFORMATION FOR SEQ ID NO:892:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 95 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC AAAGAGGCCT AGTGGAGAGT GAAGCTTAAG ACTGCAATTG CAGAAAAAGT 60
 CCATGAGGAG AGAAGAAGGA GAAAAGGGGG AAGAG 95

(2) INFORMATION FOR SEQ ID NO:893:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 424 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

TTTTTTTTTT TTTTTTTTAA ATACTTCGCA TACTCTCAA TGCCCAAAA TAGCAAGGTG 60
 GTAAAAAGAG AATTAGATGA TGATGTTACT GAGTCTGTCA AAGACCTTCT TTCCAATGA 120
 AGACGCAGCT GATGATGCTT TTAAGACAAG TGAAC TAATT GTTGATGGCC AGGAAGAGAA 180
 AGATACAGAT GTGAAGAAG GATCTGAAGT CGAAGATGAA AGACCAGCTT GGAACAGTAA 240
 ACTACAATAC ATCCTGGCCC AAGTTGGATT TTCTGTAGGT TTAGGAAATG TGTGGCGATT 300
 TCCATACCTA TGTCAGAAGA ATGGGGGCGG TGCATATCTT TTACCATATT TAATACTACT 360
 TATGGTAATA GGTATTCCCC TTTTTTCTT GGAACTCTCT GTGGGTCAA GAACCACTCT 420
 CGAG 424

(2) INFORMATION FOR SEQ ID NO:894:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 390 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GCCAAATCA AGCAAAGTAT GAAGAAAGAT AAAGAAGGGG AAGAAAAAGG GAAGCGAAGA 60
 GGATTCCCCA GCATCCTGGG ACCCCCACGG AGACCAAGCC GTCATGACAA CAGTGCAATT 120
 GGCAGAGCCA TGGAATAACA GAAGGCGCGC CACCCTAAGC ACTTATCCAC ACCCTCATCT 180
 GTGAGTCCTG AACCTCAGGA CTCTGCCAAG TTGCGCCAGA GTGGGTAGC AAATGAAGGA 240
 ACAGACGCTG GATACCTGCC TGCCAATTCC ATGTCTTCTG TAGCTTCAGG GGCCTCTTTT 300
 TCCAGGAAG GAGGGAAGA GAATGATACA GGATCAAAGC AAGTTGGAGA AACATCAGCA 360
 CCTGGAGACA CCTTAGATGT CACCCTCGAG 390

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 595 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```

GAATTCGGCC TTCATGGCCT AGTAGCTGGT ATTTATTCCC CAAAGTAATA ATGTTGAAGT      60
ATGGGTCTCA TCATTCCCAT ACACAGAAAC ACAAACACT TTGATCATAA ACTTTTTTCT      120
TCAGAAGCCA AACTAACTTG CAGAATAATA GAGCCACTGG TTTAATGTTT CCTCAAGATA      180
GGTTTTAGTG TAAGCTAGTA TTCTGTGTGT TCGTAGAAAT GATTCAATAC CTGCAGCTGG      240
TGAATTAGGA ATTGTATTGG TTGCCTTTTT TATATTAGAT GAGGTGCAAA AATTTTAATG      300
CTAGTCAGTA TGCACCACCA CAGGAAAGTT AGATCCCATT AGCACTTGAA ACTACAGCTT      360
TGGAAACTTA GGCTAAGTTA ATTTGGATTT GTTACTTGAT TCACCTACTG ACCTTTTCTT      420
TTGTTTGAAG TGCTTATCAG CATAATGAGC TAAGTGTCAT GCATATTTGT GAAGAAACAC      480
CCTTTTGGT CCCTTTGGG ACAGAGAGGT ACTCCTTGAT CTTTATGAAT GACAGGTTAC      540
TGTTTTGCCT TATTGCTTAA CTTAATGTAG TGAAATAAAG CAGACGAGGC TCGAG      595

```

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```

GGCTGATCCG CGTGAACATG GAGGACTTGC GAGAGCAGAC TCACACCCGC CACTATGAAT      60
TGTACCGACG CTGTAAGCTT GAAGAGATGG GGTTCAGGA CACTGACCTT GACAGCAAAC      120
CCTTCAGTCT TCAGGAGACA TATGAAGCAA AAAGGAATGA ATTCTGGGA GAACTGCAGA      180
AGAAAGAAGA AGAAATGAGA CAAATGTTTG TTATGAGAGT GAAGGAGAAA GAAGCTGAAC      240
TTAAGGAGGC AGAGAAAGAG CTTACAGAGA AGTTTGACCT TCTAAAGCGG ACACACCAAG      300
AAGAAAAGAA GAAAGTGGA GACAAGGAGA AGGAGCTCGA G      341

```

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```

GAATTCGGCC TTCATGGCCT ATGCCTTAAT TTTGCTGTTT GCCCTCGGAT CTCTGGGTTT      60
GATTTTTCG TTAGCTTTAA ACAGACATAA GTATCCCCTT AACCTGTACC TACTTTTGG      120
ATTACGCTG TTGGAAGCTC TGAAGTGGC AGTTGTTGTT ACTTTCTATG ATGTATATAT      180
TATTCTGCAA GCTTTCATAC TGAAGTGGC AGTTGTTGTT ACTTTCTATG ATGTATATAT      240
ACAATCTAAG AAGGATTTCA GCAAAATTCG AGCAGGGCTG TTTGCTCTTT TGTGGATATT      300
GTGCTGTCA GGATTCTGA AGTTTCTTTT TTATAGTGAG ATAATGGAGT TGGTCTTAGC      360
CGTGTCAGGA GCGCCACTCG AG      382

```

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

```

GAATTCGGCC TTCATGGCCT ACGAGCCTCA CATCACTTGT ACAAGCCACC TGGGAGAAGT      60
GGCCCTCAGG AAGATCCTAA AACCAATACA CAAATACAAC TTTTTCATTT CATTAATACA      120
TCAAGTTCAT ATAAGAGTCA AACAGGTAAA AGCAGCATCC CAAACTGTTT TCTCCTCGTA      180
CATGTCAGTT CCACGATCCT CAGTCTCATA AAGTCAGGGA CTAGAGACCA ATGTAATTAT      240
CAATACGTAC CTGCCTTTGA GTGAACCTTC AATGCCAACT AGGAAGGGCG CTCCAAAAC      300
GACGTTATTT GTAACCTCTA GGAAGACAAA CACGGGTCAG AACCCATACT CTGCGGGCCT      360
TGAAATGGAA AATCTCTCCT CTAGACAGAC TCATCCTGGC CGTAAATATC AGGAGACTCG      420
AG                                          422

```

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 806 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

```

NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      60
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      120
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      180
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      240
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      300
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      360
NNNNNNNNNN NNCNTTGCAN GNTTTGGTTC CNTTTNTTCC TTGTTTNTTT TTTTGCACAA      420
TATTTCAAGN TTTACNAGGC ATACATCAAT CCAAGTTCGG AATTTTAATT AAGAATTCGG      480
CGTTCATGGC NTAAAAGAAN TTGATGCTAC CCCCAGGAAAT GCCAGAAGAG GANATACATT      540
GAAATAGACN GTGATGAAGA GCCCAGGGGT GAATTACTTT TTNTTCGGGA CANTGAACGC      600
NTTCATAAAA AGCCAAAGTC TGACAAAGAG ACAAGAGTNG CAANTNCAAT GGNTGGANAG      660
ACAGACCGAA AAGAATTTNT GAGGAAGAAA ACCAAAACAA ATCCATNNTC CAGNTCGACA      720
AATNAAGAGA AGNAAANACA GAAGAACTTT ATGATGATGC GGTATAGCCA GAATGTCCGG      780
TCAAAAAATA AGCATTCCTT CTCGAG                                          806

```

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

```

GAATTCGGCC TTCATGGCCT AGGAGGGCCT GTTTCAGAAT TGCTTTAATA GTTCCCTTCC      60
AGTTGAATTT ACCTTTTGCA GGAGCCTCAT CGTCTTCTGG TTCTCCGCCC TCAGGATGCT      120
CTGGGAGCTT CATCTTTTTC TTCTTAGAAT CTGTTTCAAC TTCCGAGTGC CTCCGCTTCC      180
TCTTCCCTGC CCCACGCGTG CCTCTTCCTC ACTGGCGCTG TCCTTGCGCT GCTTCTTCTT      240
CTTGCTCCTC TTCCCTGCAG AGCCATTGGC CTCAGGGACT TCCTCCCCAC CAGCCTCAAG      300
GTCAGCCTCC TGCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:901:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

```

GAATTCGGCC TTCATGGCCT AAGAAAAGAC AAGGTCCCCA TAAGAGTGGC GAGAGGAACA      60
GAGCCAGGAC ATCGGAAAGC AAGCCCCTGT GTTCCCAAAC CGCAGAAGAG GGAGCTCTGA      120
TGTTAGACAA GCCACCCTCC TACAAGCGAA GGGAAAGTAA CTTTGAGCAA AAATGAGCAA      180
CAGAAAATGA GATCAAGTC AGATCTCATA CAAAGTTGCA AGATGAAAGA ATGAGCAGCA      240
GAATAACCTC CCTGTGATGT GGAAAGTGTG CCAGGAAAAC AGACCCAAAC GCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:902:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

```

GAATTCGGCC TTCATGGCCT AGGGGTTCTT TCTCCTGCAC GATGCCAGGT GGTACTGGAA      60
TCTGCTGAGT GGGATTCCGT GGTGAGGATC ATAAGGGCAA ATTTCAAAGG CTTCTGGCTC      120
CATGAGAAAT TCTTGAAGCA GGGTATCTCA CTGCTAGAGT CTAACGGAAA TGCTTCTTGT      180
GGAGAAGCCC TTTTGTAAGA AGGATGGAGT TGTCTCTGTC CCAGTTTGG CCCTTGGGAT      240
TCTGTAGGTG ACGGTCTTAA CTTGTGGTCT GTTCTCTAGG ACTGTGAGTG GTGGATTAGA      300
AGAGAGATGA GGAGCTGCCA AAAGCAGCTA CACAGAGAAC AGAGTTAGCA AATGGCACCC      360
GAGACAGAAC TATAGCAGAT GCAAGAGCCA AAAACCCACA GCCGCATTGA ATTCTAGACC      420
TGCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:903:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

```

GAATTCGGCC TTCATGCCTT GTAACCATCA GGTAGATACA GCACCAACGG TAGTGGCTCT      60

```

```

TTATGACTAC ACAGCGAATC GATCAGATGA ACTAACCATC CATCGCGGAG ACATTATCCG      120
AGTGTTCCTTC AAAGATAATC AAGACTGGTG GTATGGCAGC ATAGGAAAGG GACAGGAAGG      180
TTATTTTCCA GCTAATCATG TGGCTAGTGA AACACTGTAT CAAGAACTGC CTCCTGAGAT      240
AAAGGAGCGA TCCCCTCCTT TAAGCCCTGA GGAAAAAACT AAAATAGAAA AATCTCCAGT      300
CCTCGAG                                           307

```

(2) INFORMATION FOR SEQ ID NO:904:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 322 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

```

GAATTCGGCC TTCATGGCCT AGGACCTCGT AGGTCCTTAC AGCACCACAG TGCTCTTCAT      60
CTCTCAGAGG ACTGAACCAC CAGCCAGCAC CAACAGAGAC ACTGTGGAAA GCACAAGGAC      120
CCGACGGGCA CTGAGTGACG AGCAGTGTGC TGCCGTGATC CTTGTGCTGT TTGCTTTCTT      180
TTCCATTTTG ATTGCCTTTA TCATTAGTGA CTTTGTAAAT AAGTGAAAAT ATAACCTTAT      240
TTTTTAACTC TATTACATTT TATTTTGTCA TGTACTAAAA TTATTTCTGT ATTGCTTTNA      300
TAAAAAACAG TGGCACCTCG AG                                           322

```

(2) INFORMATION FOR SEQ ID NO:905:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 318 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

```

GAATTCGGCC TTCATGGCCT AAAAAACAC ATAATTTGAA TCAACACAAC CACCCACAGC      60
CTAATTATTA GCATCATCCC TCTACTATTT TTAAACCAA TCAACAACAA CCTATTTAGC      120
TGTTCCCCAA CCTTTTCCTC CGACCCCTTA ACAACCCCC TCCTAATACT AACTACCTGA      180
CTCCTACCCC TCACAATCAT GGCAAGCCAA CGCCACTTAT CCAGTGAACC ACTATCACGA      240
AAAAAATCT ACCTCTCTAT ACTAATCTCC CTACAAATCT CCTTAATTAT AACATTACA      300
GCCACAGAAC AACTCGAG                                           318

```

(2) INFORMATION FOR SEQ ID NO:906:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 553 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

```

GAATTCGGCC TTCATGGCCT ACAGGAAACA TACAAAGCTG CTCATAGTGG GAGTCTTTT      60
GCTCATGTTT GTGTGCGGCC TCTTCTTCAC TCGACCTTCA GGCAGCTACT TCATCAGACT      120
GCTGAGTGAC TACTGGATAG TCTTCCCAT CATCGTCGTT GTCGTATTG AAACCATGGC      180

```

```

TGTATCCTGG GCCTATGGGG CCAGGAGGTT CCTTGCAGAC CTGACGATCC TGTGGGGCCA      240
CCCCATCTCT CCCATCTTTG GTTGGCTGTG GCCCCATCTG TGTCCAGTTG TGCTGCTAAT      300
CATCTTTGTG ACCATGATGG TTCATCTTTG TATGAAGCCG ATCACCTACA TGTCCTGGGA      360
CTCAAGCACCC TCAAAAGAGG TGCTTCGACC ATACCCACCG TGGGCACTGC TCTTGATGAT      420
CACCCTTTT GGCATTGTCA TCCTCCCAT CCCTGCATAC TTTGTATACT GCCGCATACA      480
TAGGATTCCC TTCAGGCCCA AGAGCGGAGA CGGGCCTATG ACAGCCTCCA CATCCCTACC      540
CCTAAGTCTC GAG                                                                553

```

(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

```

GAATTCGGCG TTCATGGCCT AGTAGAGAAG ANNNTATTGC NGTGACAATG AGGTTTCTAC      60
GTTCAAGTGC AAGAGTTTTT GTTATTCTGA GTGTGGAAAT GGCTTCATCC AAAAAGAAAA      120
ACAACTTTAT TCCACAGCCA ATTGGAAAAT GCAAGCGTGT ATTCCAAGCA TTGCTACCTT      180
ACGCTGTGGA AGAATTGTGC AACGTAGCAG AGTCACTGAT TGTTCCTGTC AGAATGGGGA      240
TTGCTCGTCC AACTGCACCA TTTACCCTGG CTAGTACTAG CATAGATGCC ATGCAGGGCA      300
GTGAAGAATT ATTTTCAGTG GAACCACTAC CACCACGACC ATCATCTGAT CAGTCTAGCA      360
GCTCCAGTCA GTCTCAGTCA TCCTACATCA TCAGGAATCC ACAGCAGAGG CGCATCAGCC      420
AGTCACAGCC CGTTCGGGGC AGAGATGAAG AACAGGATGA TATTGTTTCA GCAGATGTGG      480
AAGAGGTTGA GGTGGTGGAG GGTGTGGCTG GAGAAGAGGA TCATCATGAT GAACAGGAAG      540
AACACAGGAA GCTCGAG                                                                557

```

(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

```

GAATTCGGCC TTCATGGCCT AAAAAAGTCA GCCAGGTGTG GTGATGTGCG CCTGTGGTCC      60
CAGGTATTCA CGAGCTGAGG TGGGAGGATC ACCTCAGCCC GGGAGGTGGA GGTTCAGTG      120
AGCCCATATC CCGCCACTGC ACTCCAACCT GGGAGACAGA GCGAGACCCT GTCTCCAAAA      180
AAAAAAAAAA AAAATCCGGG ATCTATTTAT GTAACACTA GAATCTTAAG TTCAGAATTT      240
ACTCCATAAG AGTATATAAA AAACCTACTG TGATTTTATC CATGTTTTTC CTAATATATA      300
ATAGGTCTAA GTCTTGTAAT TTTCTGTCCT GTCCACAGAG CCTTGAAAAT AATTTAGAGC      360
TCAGTCATTC AGTTTGGATT TATGTATAAA TTGAAATATA TTAATTACTT ATTTATAGTG      420
CAGCTCGAG                                                                429

```

(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

```
GAATTCGGCC TTCATGGCCT AGTCCCTGAA AAAAAAAAAA GAAAAAAAAA ATTTAAATAG      60
AGGAAATACT AGCTAAGTTT AATGTAGGCC AGTTCTAAAA TAATGATTTA TTGCTGCTGT      120
TGTTACATAA TTTTCTTAAA TATTTTAAAG ATTGCACACT GTCTGCTCGT AGGCCATGAA      180
```

(2) INFORMATION FOR SEQ ID NO:910:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

```
TACCTGCAGT TGTACCGGGT CACATGTGAC CAAACCTACC TGCTCCGATC CCTGGATTAC      60
GTAAAAAGAA CACTTCGGAA TCTGAATGGC CGCAGGGTCA CCTTCCTCTG TGGGGATGCT      120
GGCCCCCTGG CTGTTGGAGC TGTGATTAT CACAACTCA GAAGTGA CTGAGTCCAG      180
GAATGTGTCA CAAAGTGAGT TTTAGAACTG GAAACATTTT CTCCCAATTC CCAGTGGAAG      240
CTCTTGCTGT AGAAAGATAT TCAGAAAGGA AACTATTTT CCATTATCC ATTGTTGTAA      300
ACAGATCACT CCAAATGTT AATCTTGAGC ATAGTGGTGG GATCATATGC CCTCTTTTAA      360
TCCAAGCATG TGTGTGCCGG TCTCGAG      387
```

(2) INFORMATION FOR SEQ ID NO:911:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

```
GAATTCGGCC TTCATGGCCT AGTGTCTTGA CAATGGTTGA GCTGGTTTGG ATCACAGGAA      60
CATTATTATTG ATAACGATGG AAGGAAAAAA CAGTGCTGTA ATAAGTCGCT TCTTAAAATG      120
TGGGGTGTTA TTAAAAGAAT AATGGGAAAG TGCTACTGGG AAGGCAACA CAGCAATTGT      180
ACTCTACAGA CAGGGATTCT CCTATTGGCC ATTTTAGAAA CATTCCCCAG GCAACATGAG      240
ATTATCCAAG TGGAGAGAAC CAGAGTCAGA GCCATTTCTT AGGCCGACAG AGCAGCGCTC      300
CAGATGAGAT ACTGAAGGTT TGAAGTCAAG TGATGGCAGT AAGATCAGAA AGCAAAAGGC      360
ATATCACAAA GAAACCATAA GATTCTCCAT CTGGATATAT AGAAGATAAA TGGAAAGAGA      420
AACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:912:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

GAATTCGGCC	TTCATGGCCT	AGAAAACCAA	ATACTGCATG	TTCTCACTCA	TAGGTGGGAA	60
CTAAACAATG	AGAACACTTG	GACACAGGGC	TGGGAACACC	ACAACTTCTT	TTTCAGTTCA	120
TAACTCATAG	TCCACGATCC	ATGTGCTCTT	TGACTTGACT	TTTCTTAAAC	TCCTATTTTA	180
TGTGCTTCTG	ACTTGCTTTC	CCTTCTTATT	TGTAATCCAC	ACTAGCCTCA	AAAGATGCAT	240
GAAGTGTGAA	TTTTCACTTC	CAGGGCCATG	GATAGTTGAA	CATCTAGTAG	TGAATTTCCCT	300
CTTTCAGAAG	ATAAATAAAT	TCATTCAATC	CCCTGGATCT	AGAAGGACAC	ACTCGAG	357

(2) INFORMATION FOR SEQ ID NO:913:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

CAGCCTGGGT	GGCAGAGCAA	GACTCCATTT	CAAAAAAAAA	AAAAAAAAAGC	CCAAGTCACT	60
TGCTGTTTCT	GGATCCAGTA	ACGCTGCCTC	AAATTTGATT	CAGTCACCTC	ACATACTTAA	120
CATTCTGGCT	TTCTTTTCT	CTGTTTCTGG	CATCTGGAGA	TTTCTTTTTT	TTGTGTGTGA	180
GCTCATTAT	GGTTATCTGT	TGTTATGTTT	AATACAACCA	TTCTTGGCTG	AGGCTGCCAC	240
ATCTAGAGCT	GGTAAACTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:914:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

GAATTCGGCC	TTATGGCCTA	GTGATATGTC	ATAATCCCTT	CTGTGGGCTG	GGCCACATA	60
AGGAGAGTCA	AATCACTTGG	GTGCTGGGAA	GAGGCACATG	TCACACGTGC	AAGAAGGTCC	120
AAGGATGAGA	TTAAAAATTC	CACAAAGGTC	CAAATTCTAG	GGCCAGACA	GAAGAGAAGA	180
GTCACATCAT	CTAGATGATG	AATGAAAAGA	TATGTCATTA	TTCTCCTTTG	GGCAGTGCTT	240
CTGCAGAAAA	GTTGCACCTT	CTAGGTGTTG	GACTCAGCAA	TATATCACAA	TGTCTGCAGT	300
ATTTTGGAAG	GAGAGGAGAG	TCACCATTAC	TTAGGTGCTA	GGCCAGCAA	TACATCTCAA	360
GCACTTCTTG	GGCAAAGCCC	AAGCAGTAAA	AAAGAGTCAC	ATTACCTAGG	TTCTGGGTAT	420
AGCAATATGT	CACAAATGCC	CCTAAGAAGA	GGGCCAGGA	AAAGACTCGA	G	471

(2) INFORMATION FOR SEQ ID NO:915:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:


```

GAATTCGGCC TTCATGGCCT AGAGTGCCTG ACCTTCCCTG TTCAAGAATT TATAAAGATT      60
CCTAACAGCA ATTCTAGAAA AAGGATAAAG ACCTCCACTT GGCTTTTCAGA AGCCTCCAGC      120
ATCTGGCCCA AGCTAATACA GCCTTAAAAC TAATCTGGTT ATAGCCCAGC CCCTCATTTT      180
ACAAAGAAAA CTGAGACCCC TGGCTATCTA TTAACGCT CCAACCAAAC ACATCATCTA      240
TCCCCCTCTCT TCCTCCAGAT AACACTCACT TACCAGGCTA CAGTGAGGTC CACGTCTCTG      300
ATATGAGGCT CCTGTCCACA AGTTTGGTAA CCTTCATCTG CCTCATCACC AGTGAGCACC      360
CAGCACTTAG CACTGTGCCC GACACAGAAA TGAACACTCT GCTCCTCCGG GCCGGCGTGG      420
GTGCGCCGCT GCGGCCACCG GCAGCGCTCG AG                                         452

```

(2) INFORMATION FOR SEQ ID NO:916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

```

GAATTCGGCC TTCATGGCCT ACAAATGGTT GGTTTATGTT ATGATAGCAA TTTTCTGCAT      60
AGCATCAGCA ATGAGTCTGT ACAACTGTCT TGCTGCACTA ATTCATAAGA TACCATATGG      120
ACAATGCACG ATTGCATGTC GTGGCAAAAA CATGGAAGTG AGACTTATTT TTCTCTCTGG      180
ACTGTGCATA GCAGTAGCTG TTGTTTGGGC TGTGTTTCGA AATGAAGACA GGTGGGCTTG      240
GATTTTACAG GATATCTTGG GGATTGCTTT CTGTCTGAAT TTAATTAATAA CACTGAAGTT      300
GCCCAACTTC AAGTCATGTG TGATACTTCT AGGCCTTCTC CTCCTCTATG ATGTATTTT      360
TGTTTTTCATA ACACCATTCA TCACAAAGAA TGGTGAGAGT ATCATGGTTG AACTCGCAGC      420
TGGACCTTTT GGAAATAATG AAAAGAATGA TGGAAATCTC GAG                                         463

```

(2) INFORMATION FOR SEQ ID NO:917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

```

GAATTCGGCC TTCATGGCCT AACGTAATTG AAAAGGCTTT CCTTTACACT TCCAGGACCA      60
AACAGCAACT TCCTGCCACA CACTTCCACC CTATCACTGG GAGAAATCCT TTTCTGGACA      120
TGAGCCTTTG ACCTGGGTGG GGCAGAAAGA ACCACAAACT CCATCTCCCA ATAGAATTT      180
GAAATTCACCT CAGCTTTTCC TTTCATGCTG TTTGTTGCCT GCTTGTGCA CTCCTCCTGC      240
CCCAGAACTG CAAGATTTTT AGCTTCACCC CTTTCTGAGA GTAATGTTAT CTTTTATCAG      300
AATCAGTATC AGTTCCCTG TATTCTGTGC TTCATCGAAT TTGCAAGACT GACCTCTTT      360
AAGCATTTAA TTAATCCCA GAATCTCGAG                                         390

```

(2) INFORMATION FOR SEQ ID NO:918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

GAATTCGCCT	TCATGGCCTA	CAGTGACAAT	GAACAAAACC	AGCACACCAC	ACAAATGAGT	60
GATGAGGAAG	AGGATGATGA	TGGCTGTGAC	CTTTTGTGCTG	ACTCTGAGAA	GGAGGAGGAA	120
GATATTGAGG	ACATTGAAGA	AAATACTAGA	CCTAAAAGAA	GCAGACCTAC	ATCGTTTGCA	180
GATGAGCTGG	CTGCCCGCAT	CAAGGGGGAT	GCCATGGGTC	GAGTGGACGA	GGAGCCGACA	240
ACCTTACCCT	CAGGAGAAGC	AAAACCTCGG	AAGACACTCA	AAGAGAAGAA	GGAAAGGAGA	300
ACTCCTTCAG	ACGAGTCTTC	ATCATCCAAA	CCTGGAAGA	AAATCCCAGC	AGCTCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:919:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTCGGCC	AAAGAGGCCT	AGTGCTATTG	AAACATTGGT	AACAGCAATT	TCTTTAATTA	60
AACAATCCAA	AGTCTCTGCA	GATGATCGTT	GCAAAGTTCT	TATTAGCTCT	CTGCAGGATT	120
GCCTTCATGG	AATCGAGTCC	AAGTCCTATG	GGTCTGGATC	CAGACGTGAA	CGATCAAGAG	180
AACGGGACCA	TAGTAGATCA	CGGGAAAAGA	GTCGTCGCCA	TAAATCTCGG	AGTAGAGATC	240
GCCACGATGA	CTATTACAGA	GAGAGAAGCA	GAGGTCGAG			279

(2) INFORMATION FOR SEQ ID NO:920:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTCGGCC	TTCATGGCCT	ACAGAACTTG	AAGCCATCAA	TAAAAGAGTA	AAAGACACTA	60
TGGCACGATC	AGAAGATTGG	GACAATTCCA	TTGATAAAAC	AGAAGCTGGA	ATTAAGGAGC	120
TTCAGAAGAG	TATGGAGCGC	TGGA AAAATA	TGGA AAAAGA	ACATATGGAT	GCTATAAATC	180
ATGATACTAA	AGAACTGGAA	AAGATGACAA	ATCGGCAAGG	CATGCTATTG	AAGAAGAAAG	240
AAGAGTGTAT	GAAGAAAATT	CGAGAACTTG	GATCACTTCC	CCAGGAAGCA	TTTGAAAAGT	300
ACCAGACACT	GAGCCTCAAA	CAGTTGTTC	GAAAACTTGA	GCACTGCAAC	ACAGAATTAA	360
AGAAGTACAG	CCATGTTAAC	AAAAAGGCTT	TGGATCAGTT	TGTAAATTTC	TCCGAGCAGA	420
AAGAAAAGTT	AATAAAGCGT	CAAGAAGAGT	TAGATAGGGG	CCCACTCGAG		470

(2) INFORMATION FOR SEQ ID NO:921:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

```

GAATTCGGCC TTCATGGCCT AGCAGTGGCG TTGGAAGGAG ACGCGGAGGG GCAGTGGCGT      60
TGGAAGGAGA AACGGAGGGG CAGTGGCGTT GGAACGGGGG CAGTGGCGTC GGAAGGGGAC      120
GCGGAGGGGC AGTGGCGTTG GAAGGAGAGA CCAGGGCCGC GGGGCTGCTT CTTGTAAAGG      180
GCCAAGCTGT GAGGACTTCG GGCTTTGCGG CCGCTTTTGT CTATGTCCCA TCTCCTTCTT      240
TGTTTGTGTT TTCTCAAACC CTTTAAAAAC GTGAAAACCA TTTCTAGCTT GGGGGCCCTA      300
TAAAAATAGG CCTCGCTGGC CCTAGTTTGA TGACCCCTGA AACAGACAAT TCAAGGAGAA      360
GCTTAGTGAA AGAGTCACTT ATAGCTTCAT AAAAATAAGA GAAGATATAG TATCCATAAA      420
ATAATAATAA GATTGTATCC ATGAGGTTCC TCGAG                                455

```

(2) INFORMATION FOR SEQ ID NO:922:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

```

GACATGACCC TGGACAAAGA ACAAATAGCG AAGGATTTGC TTTCAGGGGA AGAAGAGGAA      60
GAGACGCAAT CATCTGCTGA CGACCTCACC CCGTCCGTGA CCTCCACGA GGCCTCCGAC      120
CTCTCCCTA ACCGGAGTGG ATCTCGTTTC CTGGCTGATG AAGACAGAGA GCCTGGCTCT      180
TCTGCCTCCT CCGACACCGA GGAGGACTCT CTTCTGCCA ACAAATGTAA GAAGGAGATC      240
ATGGTGGGAC CTCAGTTCCA AGCTGACCTC AGCAACCTGC ACTTGAACCG GCACTGTGAG      300
AAGATCTACG AGAACGAAGA CAAGCTACTC GAG                                333

```

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

```

GAATTCGGCC TTCATGGCCT AAGCAGCCTT TCACCAGGGC TCCATCTGTG AAGAGTCTCA      60
GCCATGACTT TGAGCTGAGC TTGGGAGAAG TAAAGCAACT GTTAAGGCCA GCCCTTGCCC      120
CTCAGACCTG CCATGAAAGG AATGAGCCCT AGACTGACTC CTGCAGCACC CCCGGGACAG      180
GCTGGGACCA GCTGTTTGTG TCCAGGTGTC AGAGTCCCTC CTCCTCTCC AACCTCTCCA      240
TTGAATTCTA GACCTGCCTC GAG                                263

```

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

```

ATTTTGGGGA CCAAGAACCT GTACAAGGAT TTGTGATGAA CTTTTC CAAT GGGGAAATTA      60
TCGACATCTT CAAGCCAGTG CGCAAGCACT TTGATATGCC TCATGATATT GTTGCATCTG      120
AAGATGGGAC TGTGTACATT GGAGATGCTC ATACCAACAC CGTGTGGAAG TTCACCTTGA      180
CTGAGAAATT GGAACATCGA TCAGTTAAAA AGGCTGGCAT TGAGGTCCAG GAAATCAAAG      240
AAGCCGAGGC AGTTGTTGAA ACCAAAATGG AGAACAAACC CACCTCCTCA GAATTGCAGA      300
AGATGCAAGA GAAACAGAAA CTGATCAAAG AGCCAGGCTC GGGAGTGCCT GTTGTCTCA      360
TTACAACCCT TCTGGTTATT CCGGTGGTTG TCCTGCTGGC CATTGCCATA TTTATTCGGT      420
GGAAAAATC AAGGGCCTTT GGAGCAGATT CTGAACACAA ACTCGAG                      467

```

(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

```

GCCATCCTCT GACAAAAGAA AGAATATGTA CTCAGGTGGA GAGAATGTTT AGATGAATGG      60
GGATACGCCC CATGATGGAG GTCACGGAGG AGGAGGACAT GGGGATTGTG AAGAATTGCA      120
GCGAACTGGA CGGTTCTGTG GTGGACTAAT TAAAGACATA AAGAGGAAAG CGCCATTTT      180
TGCCAGTGAT TTTTATGATG CTTTAAATAT TCAAGCTCTT TCGGCAATTC TCTTCATTTA      240
TCTGGCAACT GTAACATAAT CTATCACTTT TGGAGGACTG CTTGGGGATG CCACTGACAA      300
CATGCTCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

```

GAATTCGGCC TTCATGGCCT AGTGGAGACC TGGCCAAGGT ACAGAGAGCT GTGTGCATGC      60
TGAGCAACAC CACAGCCATT GCTGAGGCCT GGGCTCGCCT GGACCACAAG TTTGACCTGA      120
TGTATGCCAA ACGTGCCTTT GTTCACTGGT ACGTTGGGGA GGGGATGGAG GAAGGTGAGT      180
TTTCAGAGGC CCGTGAGGAC ATGGCTGCCC TTGAGAAGGA TTATGAGGAG GTTGGTGTGG      240
ATTCTGTTGA AGGAGAGGGT GAGGAAGAAG GAGAGGAAAA CCTCGAG                      287

```

(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

```

CCGCGCACCA ACAACAGCAA CAACTCCACT GCGCCGGGCT GAGGAGCAGG AATTAGGAGC      60

```

```

TCGCGAATAA TATGAAAGGG ATCCGCAAAG GGGAAAGCCG AGCAAAGGAA TCCAAACCCCT    120
GGGAGCCTGG CAAGCGAAGA TGCGCTAAAT GTGGCCGCCT AGACTTCATC CTGATGAAGA    180
AAATGGGGAT TAAAAGTGA TTTACGTTTT GGAACCTCGT CTTTTATTG ACGGTGTCTT    240
GTGTGAAAGG TAGGTCTGCT TTGGGGGTCC CCTCCGCTTT GGATGGAGGT GGGCTGACTT    300
GTAGATGGAG AGAGGCTGGC AGCTTACTCG AG              332

```

(2) INFORMATION FOR SEQ ID NO:928:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

```

AGCCTGCCAT CCCAGGCTTC AGATTGGAGC CGATACTCAA GCAGCTTACT GGAATCCGTC    60
TCGTTCCTG GAACACTAAA TGAGGCTGTT GTAATGACTC CATTTTCATC GGAACCTCAA    120
GGAATTTTCTG AACAGACCCCT CCTGGAGCTG TCCAAAGGAA AGCCCTCCCC GCATCCCAGA    180
GCCTGGTTTG TGTCTCTTGA TGGAAAGCCA GTTGCAACAAG TGAGGCACTC CTTTATAGAC    240
CTGAAAAAAGG GCAAGAGAAC CCAGAGCAAT GACACCAGTC TGGACTCTGG GGTGGACATG    300
AATGAGCTTC ACTCAAGTAG AAAGCTCGAG              330

```

(2) INFORMATION FOR SEQ ID NO:929:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

```

GAATTCGGCC TTCATGGCCT AGTGAGTGGG TGATATCTGT AAAGTGCATT GTCTTCAGTT    60
GTAGGTGGGG TAGGTGTAAG GGAATGGCGG GGGGGCATGC AATATGGGTG AGGGAGGGCA    120
GTGCCCTTCT CATCCAGAC CTGAGCCCCC CCCAAAACCT GTCTGGACTT TGATCAGGAT    180
AAGAACGTTG CAGGGCGAGG CAAGTTCCTG AAGCCGAAGA GGTCTGGGCT GGGGCCTACT    240
GGAGAAAGGG CATAGACTGG CTCGAG              266

```

(2) INFORMATION FOR SEQ ID NO:930:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

```

GCGAAAATAA CCTTTTCTAA TGAGGATGTC TGATACTGTT ACTGTAAAAG ATGAACTGC    60
AACAAATGAAG GATTTGGAGG CAGAAGTGAA AGATACAACC AGAGTTGAAA ATCTTATCAA    120
ATCAGAAAAC TATGGGAAGA TTTTGGTAGA GAAGAATGAA CATTGTATTG AGAACAATAT    180
AGATTTGCAG GAGAAAATTC AGATCCAGTT AACACAATCA TTTGAGAAAG AAGAGAAGCC    240

```

CTCAAAAGAT GAAGCAGAAA AAGAAAAGGC CAGTGATAAG TTGCCCAGAA AAATGTTATC 300
AAGAGATCCC AGTCTCGAG 319

(2) INFORMATION FOR SEQ ID NO:931:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

GAATTCGGCC TTCATGGCCT AAAGAAGAGC AGGAAGTCCA ATGTGGCCGA AGCAGAGTGA 60
GCAAGGGCAG GAGTACCAGA GGAGGAGATA GGACGCCAAA GAGTTAAGAA AAGGAGGAAT 120
GCAGAACCTT TCCATCAAAA ATAAATAAT ACATAACCAT GGTTATGTGG GGTGGGGTTG 180
TCTCTTTCTT TTGGAAGAA GAAGGGCTT CTGGGAATAG ATGGCCAGGC CAGGCAGCAA 240
GCTGCTAAAC TCGAG 255

(2) INFORMATION FOR SEQ ID NO:932:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 588 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

GAATTCGGCC TTCATGGCCT AGCATTTCCT AAAATTCAGT GCAAGCGCCA GGCGATTTGT 60
GTCTAAGGAT ACGATTTTGA ACCATATGGG CAGTGTACAA AATATGAAAC AACTGTTTCC 120
ACACTTGAC CTGATCAAGG AGCAGTGCTT CTCCATTTGT TTGTCAGAGA AATGTTTTTC 180
ATTTCCCGTG TGTTCCTATT TCCTTCTGAA ATTCTGATTT TATCCATTTT TTTAAGGCTC 240
CTCTTTATCT CCTTTCTTAA GGCAGTGTG CTATGGCACT TTCTATAAC CTTTTCATTC 300
CTGTGTACAG TAGCTTAAAA TTGCAGTGAT TGAGCATAAC CTACTTGTTC GTATAAATTA 360
TTGAAATCCA TTTGCACCCT GTAAGAATGG ACTTAAAGT ACTGCTGGAC AGGCATGTGT 420
GCTCAAAGTA CATTGATTGC TCAAATATAA GGAAATGGCC CAATGAACGT GGTGTGGGA 480
GGGGAAAGAG GAAACAGAGC TAGTCAGATG TGAATTGTAT CTGTTGTAAT AAACATGTTA 540
AAACAAACAA AAATTGTTAT TTTCTTTTC CTTCCGTCAG AGCTCGAG 588

(2) INFORMATION FOR SEQ ID NO:933:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 520 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

GAATTCGGCC TTCATGGCCT AGGGGAAGGA AAGGCCCGTG TGGAGGAGCA TGGAGCCATC 60
TGCTCATGAA GGAAAGGCAG GGATGGGGCA GAGGTGTTGG GGCTTCCGTG CGACTCCAGA 120
GGCCAAGCCC AGAGCTGTGT GTGGAGCCCA TGAGGAGCAG AGATTTTCCA GCAAAGGTGC 180

```

ATTTGTGGGC CTCCAGATGG AGGCCCTACC TTCTCAGCAA GGGAAGAAAC CCCTCTCTCT      240
TTGACCTCTC TCCCCTGCAC AATTAGAAGG TTCTGAAGAG TGACTTCATT ATTGGTGGGT      300
GAGTATATGT TTATTGGGCA TCTGTGGTGT GCCAGATGTT GTGTTGAGTG CTGGGTGCAG      360
AGGTAATGG  GATATCTGGT TACCGCCAC  ATGGGGCTTA TAGTGGGGGA AGTGGGGGAG      420
TAAGTCAGGA CACACGTAAG CAAACGCTAG AATGGATAGA TATTGTGATT AGAGCATTGG      480
AGAGAAAGAA CAGGATGTTT CAAGAAAGGA CAGTCTCGAG      520

```

(2) INFORMATION FOR SEQ ID NO:934:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

```

GAATTCGGCC TTCATGGCCT ACTTTTTTTC TCAAGGTGCA ATGAAAGCCT TCCACACTTT      60
CTGTGTTGTC CTTCTGGTGT TTGGGAGTGT CTCGAAGCC  AAGTTTGATG ATTTTGAGGA      120
TGAGGAGGAC ATAGTAGAGT ATGATGATAA TGACTTCGCT GAATTTGAGG ATGTCATGGA      180
AGACTCTGTT ACTGAATCTC CTCAACGGGT CATAATCACT GAAGATGATG AAGATGAGAC      240
CACTGGGGAG TTTCTCGAG                                     259

```

(2) INFORMATION FOR SEQ ID NO:935:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 413 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

```

AACAAAATGA AACAAACAAA AGACAGAGGC CAAGAAAGGC TAAGTAACTT GCCTAAGACT      60
ATATAATAAG TCACAGGGCA GGAATAAAA CTCAGTTTTC CTGACTTCCA TTAAGGTGTT      120
CTTTTCCTCA CTCCACATTG CCTGTCATTT TTTTCTGAT TATTCTTAAG AAGGAGTGAG      180
GAGAGAGAAT AGAGAAACAG ATTTTTTCT CGGACTATCT TTTCTGTAGG GAAAAACCAC      240
TGAAGCCCTA TTAGCCTGGA AGCTGCTTAT AGGGTTACAA TACTGTGTGT CCTGCAGAAC      300
CTGTGAAGCT CTTCTGTATT TTCTGGACTT TCCTGAAAAG TCATTTAGAT ATAATGTAAT      360
AAATATAATA AAGTAGTTTA GATATAATGA GGTTTTCAAT AGGCTTCCTC GAG          413

```

(2) INFORMATION FOR SEQ ID NO:936:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

```

GAATTCGGCC TTCATGGCCT ACCCTGAGAG TAAGCCAAAA AAGGAAGAAA AAAATATGGA      60
AGTAAATATG AAAGAGTGGA TTTTACGATA TGCTGAACAA CAAAATGAAG AAGAAAAGAA      120

```

TGAGAAATTCT AAAAGTTT TAG AAGAGGAGGA AAAATTGAC CCTAATGAAA GGTACTTACA	180
TCTTGCAGCA AAAGTCTGG ATGCAAAAGA ACAAGCAGCT ACCTTTAAAC TAGAAAAAAA	240
CAAGCAGGGC CGTCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:937:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

GCGAAACCGT GGTCAGCTGC AAGAAGGCAC AGGAGAACAT GAAGCAAAGG CACGAGAACG	60
AAACGCACAC CTTAGAAAAA CAAATAAGTG ACCTTAAAAA TGAAATTGCT GAACTTCAGG	120
GGCAAGCAGC AGTGCTCAAG GAGGCACATC ATGAGGCCAC TTGCAGGCAT GAGGAGGAGA	180
AAAAACAAC TCAAGTGAAG CTTGAGGAGG AAAAGACTCA CCTGCAGGAG AAGCTGAGGC	240
TGCAACATAA GAGGGAGCTC GAG	263

(2) INFORMATION FOR SEQ ID NO:938:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

GAATTCGGCT TCATGGCCTA TTCCACTACT AGGCTGACAT GCAAAATCCT AAGAGAAGTC	60
AGTCTTCCAG GATTGATCCT GGCATTTGTG CTTGCTGTTT CCCGTGCCTG GAGCACCTGT	120
CCCAGTCCC CTGTGGCTGG CTCCTTCTCA CCATCCAGGG TTCAGTCCAA ATATCTCCTT	180
CAAAGAGAGA TCTTCCAGGG TCACCTAATC CAGAGAGTGC CCTCTATGGT TGCCACATCC	240
CCCCGACCCA CCACCCACCA CCCCCACTT CAACTCCTTT ATGGCACCTG CCCCTCCCTG	300
AAATTCTCAC TGTGCTTAT TTGTTATCTA GCCCTCTCAT CAGAATGTAG ATCCACTGGT	360
GACAGGGGAC TTGTGTGCCT CGAG	384

(2) INFORMATION FOR SEQ ID NO:939:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCGGCC TCCATGGCCT AGTTGTGTTT TTTGGGCTTG CTATTAATGC AAATCTGAT	60
TGCAAATGGA TGTCATGTTT CATACCTTTT TTATCAGGAA AAAAGCAGCA AGCCTTCAGG	120
TGTTCCAGTG ATGCCTGACA CAATTGAGCT GGACTTTATG CTGCTCTTCA CAGTAAGAGG	180
TGTTGCATTG TATGTGGGGA CTATGTGCAC TGGCGTCTAA GACAGTGACC TCAACAATAT	240
TAGCTTTGCA CAAACCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:940:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 300 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

```

GAATTCGGCC TTCATGGCCT AGTGGAGGAC TGCTTTTGTG AACATGAGAA AGCAGCGCCT      60
GGTCCCTATG TATTGGGTC TTATTACAT CCTTCTTAA GCCCAGTGGC TCCTCAGCAT      120
ACTCTTAAAC TAATCACTTA TGTTAAAAAG AACCAAAAGA CTTTCTCCA TGGTGGGGTG      180
ACAGGTCCTA GAAGGACAAT GTGCATATTA CGACAAACAC AAAGAACTA TACCATAACC      240
CAAGGCTGAA AATAATGTAG AAAACTTTAT TTTTGTTC AGTACAGAGC AGAACTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:941:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 194 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

```

GAATTCGGCC TTCATGGCCT AGTATATCTG AAAAGTACAC TGTGTTTTGA AATTATAAAT      60
TTTCATCTG AATGAGGTTT CTTTTTTGA TTTTCTTAA AAAAAAAAAA CAACCTGCTT      120
TGATTTGCTT TACATTCCTT GCCCTCCATT TTTCTTATTA TATTGTAAAC ATTAGAAAAA      180
TGAACACCCT CGAG                                     194

```

(2) INFORMATION FOR SEQ ID NO:942:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 581 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

```

GAATTCGGCC TTCATGGCCT AGTGAGGATA AAGATAAGGA ACAGGCCAGG CACAGTAGCT      60
CACGCCTGTA ATCCCAGCAC TCTGAGAGGC CGAGGCAGGT GGATCACATG GGGCCAGGAG      120
TTTGAGACCA GCCTGGACAA CATGGTGAAA CCCCCTCTCT ACTAAAAATA GCCAGGTGTG      180
GTGGCACACA CCTGTAATCC TAGCTACTTG GGAGGCAAGG TGGGAAGTTT GTTTGAACCA      240
GGAGGCAGCG GTTGCACTGA GTCAAGATCA TGCCACTGCA CTCCAGCCTG GGTGACAGAG      300
TACGACTCTG TCCCCAAAAA AAAAAAAAAA AGATAAGGAACA GACCCAACCC GAATCCACAC      360
AACCTGACAC ACAGGAAAGT CTTGCCCATC CATCCACCTA CCTCCCCAAC CAGAGTAGTG      420
AAGCTATAAC CCCAGAGAGA TACCTTTGAT GTGAGCACTG TCCAGCATGG GCACCAAGGC      480
ATTACCTGCT TCCAGGAGTG CAACCTGGGA AAGGATAAAC TGCTCCTCTA AAGCAAAAAT      540
GGACAAGATA GTTGCACTGA AGCAAACCTG GGCATTGCTA G                                     581

```

(2) INFORMATION FOR SEQ ID NO:943:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA.

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

GAATTCGGCC	TTCATGGCCT	AAAACAGGCA	ACAATGACCT	TTTATTTTCT	GTTTGTCCCC	60
ACCTCCCCAG	CCTTCCACCT	CCTGTTCTTC	CTACCTTCTT	CCTTTTGTGAC	TAAATAATCC	120
CCACCTCCCT	TGATCATACA	GTGAGGCTAC	AGTGACTGAG	GGGAGAATCC	CCTCCTGTTC	180
ACTCTCCCAA	CCCTGCTCCA	GCCCCTCAGC	TTCCCAGACC	CTCATGCAGT	TGTTTGTAAG	240
TTCTCCCACT	GAGCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:944:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

GAATTCGGCC	TTCATGGCCT	AAAACCTCAC	GTGGCCTCTG	ATTTCATTGT	GGGTGCATCC	60
ACAGGTGGCC	CGAGCTGTTC	TTTCAGCTGC	TCCAAGGATT	GAGACCCAAG	TCATCATGAA	120
AAAGGCCCAA	GTACAGTCTT	AATGCGATAA	ATCCACTAGC	TAAGACGTCG	AGTGCCAAGA	180
CCAGCCTTCC	AGCCGAGGTT	TGGACAAAGT	CTCAGGTTCC	CGTGACTCAG	GGTAAGGTGC	240
TGGGGCTGCC	AGAGGACCTG	CCCCAGCAAG	ATTTTGTCA	AGAGCGAGAC	TCCATCAGCC	300
CAGGCAGACG	GGAGCAGGTT	CTTGCCAGC	GTAGACAGCA	GCAAACAGCA	GCTCCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:945:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

GAATTCGGCC	TTCATGGCCT	AGTGCAGGAG	ACGCCCTCAC	CGGAGATGGG	GACCGAGTCC	60
ACACGGCTCT	CACTGCAAAT	GCTTTGGGAA	AAACAAGACA	GTGTACTTTG	TGATCATATA	120
AAACAGCAAA	ATAAAATAGT	CGTGGGCACA	GGGCCAGTGA	TTCTGCAGTT	AGAGCCGTGT	180
GGACTCGGTC	CCCTCTCCGG	CTCGAG				206

(2) INFORMATION FOR SEQ ID NO:946:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

```
GAATTCGGCC TTCATGGCCT AGGTTCCCCG GCGTGGCATG GATGATGACA GAGGCCCTAG      60
ACGTGGTCCT GAGGAAGATA GGTTCTCTCG TCGTGGGGCA GACGATGACC GGCCTTCCTG      120
GCGTAACACA GATGATGACA GGCCTCCAG ACGAATTGCC GATGAAGACA GGGGAAACTG      180
GCGTCATGCG GATGATGACA GACCACCTAG ACGAGGACTG GATGAGGACA GAGGAAGCTG      240
GCGAACAGCT GATGAGGACA AAGGACCTCG AG                                     272
```

(2) INFORMATION FOR SEQ ID NO:947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

```
GTTTGGCTTA GATTTTGCTT TGGTTAGGTT GCGTTTGGG GTTGCCTTT TTTGTTGTC      60
GCTTAAATGC AATTTGGTTG TAAAGATTG ATTCCTTTGT GTTCATCTGT TCCGCTTCTC      120
AGCGGTCCAT CTCAGCGTCT CCCTTCAGGA ACCGCTGAGT GTCCTCTCTT AACATCCAAG      180
CCTTTTAATG AAATCGTACT GAAATCTGTA TCAGCTAAGA GTCCTCCAAT CCTGGTCCCA      240
TTAACTCCAA GTGCCTTTT GACAGTGACA ACAGACAGTC CCTCGGCACT CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

```
GAATTAGAAT CTCTAAAGAA ACAGGAGGGA CTTCTTAAAA ATATTCAGGT CTCACATCAG      60
GAATTTTCAA AAATGAAACA ATCTAATAAT GAAGCTAACT TAAGAGAAGA AGTTTGAAG      120
AATTTAGCTA CTGCATATGA CAACTTTGTT GAACCTGTAG CTAATTTGAA GGAAGGCACA      180
AAGTTTACA ATGAGTTGAC TGAAATCCTG GTCAGGTTCC AGAACAAATG CAGTGATATA      240
GTTTTTGCAC GGAAGACAGA AAGAGATGAA CTCTTAAAGG ACTTGCAACA AAGCATTGCC      300
AGAGAACCTA GTGCTCCTTC AATTCCTACA CCTGCGTATC AGTCCTCACC AGCAGGAGGA      360
CATGCACCAA CTCTCCAAC TCCAGCGCCA AGAACCATGC CGCCTACTAA GCCCCAGCCC      420
CCAGCCAGGC CTCCACCACC TGTGCTTCCA GCGTATCTCG AG                                     462
```

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 624 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

GAATTCGGCC	TTCATGGCCT	ACTCAAAGAG	ACAACAAATA	GCATGGTAGA	ATCAATTAAA	60
CACTGCATTG	TGTTGCTGCA	GATTGCCAAA	AGTACTATTA	ATCCCGTAGA	TGCAATATAT	120
CAACCTAGTC	CTTTGGAACC	TGTGATCAGC	ACAATGCCTT	CCCAGACTGT	GTTACCTCCA	180
GAACCTGTTC	AGTTGTGTAA	GTCAGAGCAG	CGTCCATCTT	CCCTACCAGT	TGGACCTGTG	240
TTGGCTACCT	TGGGACATCA	TCAGACTCCT	ACACCAAATA	GTACAGGCAG	TGGCCATTCA	300
CCACCGAGTA	GCAGTCTCAC	TTCTCCAAGC	CACGTGAACT	TGTCTCCAAA	TACAGTCCCA	360
GAGTTCTCTT	ACTCCAGCAG	TGAAGATGAA	TTTTATGATG	CTGATGAATT	CCATCAAAGT	420
GGCTCATCCC	CAAAGCGCTT	AATAGATTCT	TCTGGATCTG	CCTCAGTCCT	GACACACAGC	480
AGCTCGGGAA	ATAGTCTAAA	ACGCCCAGAT	ACCACAGAAT	CACTTAATTC	TTCTTGTCTC	540
AATGGAACAA	GTGATGCTGA	CCTGTTTGAT	TCACATGATG	ACAGAGATGA	TGATGCGGAG	600
GCAGGGTCTG	TGGTGAAGCT	CGAG				624

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

GATTCTAGAC	CTGCCTCGAG	CACGCTTGGA	GAAGCCCCGT	CTCTACTAAA	AATACAAAAT	60
TGGCCGGGCA	TGGTGGCGCA	TGCCTGTGGT	CCCGGCTACT	CTGGAGGCTG	AGGCGGGAGA	120
ATCACTTGAG	CCCAGGAGGT	GGAGTTGAGG	TGAGCCGAGA	TCGTGCCATT	GCACTCCGGC	180
CTGGGTGACA	GAGTGCAACT	CCGTCTCAAA	AAAAAAAAAA	AAGCATTAC	GTCAATGTCA	240
AGAGAACCTG	CTACTAATGC	TTTCTTTGAT	AGGCAGTATG	ATAGGTTGGA	AAGAATATAA	300
ACTGGGATCA	AGCTTGGGTT	CCACTTACCA	GCTGTAGTAT	GTTGAGCAAA	TTATTTAATC	360
TAACACTCGA	G					371

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

GCGATTGAAT	TCTAGGGTTT	TTTTTTTTTT	GGGATCCTGG	GTAAAATTTT	ATCCAAAAAA	60
CGGGATTTTT	TTTTTTTAA	AAAAGGAAAT	TTGAATTCAA	AATTTTGGGC	AGCCCCGGCT	120
TTTTTTTTTT	TTTTTTTTTT	TTTTTTTTTT	TTTTTTTTTT	TTGGTGGGTT	CTGAGTCTTC	180
ACTTTATTAC	TATGTCACCA	GAAGTCACCA	CCTTCACTTG	GTTCAACCACA	GATGGATGGA	240
TGTCATAAAG	GAGGGTGCCA	CGGGGCCACT	GGATTCACTC	GAG		283

(2) INFORMATION FOR SEQ ID NO:952:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

GCTTGGCAGA	TGCTAACTTC	ATGGAAGATG	GTAATAGGAA	CAGATACTGC	TCTCTGCCCC	60
TGCTTCTTGG	ATTCTTCAGC	TCCTACCGCT	GATTCGGATT	ATCCCCTTTT	GACCCTCTTG	120
GGGATCCAGA	CTGCTGCCAG	GAGGCTGAGT	AGATACCTCA	GTTATCTGTA	TGTTATTCTT	180
GAGAGGCTTT	GGCGGATCCT	CTTCACTTGG	CATCCTGTGG	CATCCCTAGG	GTCTGGTGGT	240
AGCAGTAATA	GCAACAATGA	TATCTTACAT	CTGGAACAAC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

GAATTCGGCC	TTCATGGCCT	AATTCTAGAC	CTGCCTGTCT	TGAGAGGAAC	CTTCCCTGTG	60
CTGGCTCCTG	TTGTTATCTG	TACCTAAGTT	ACTCAGTTCT	GAGTGCATGT	CTGGTAAATG	120
CTGGCCATTT	CTTTGAAGTT	CTGACTCAGA	ATCGGCCCTCC	ATTAGAGAAC	TCAGTTCTCC	180
AAACCCAGTC	ATGATCTGCC	TTAAAAATGA	CCGAAGAGCC	ACTGATGATG	GCTCAACAAG	240
CTCATTCTCA	GAAATCCTAC	GAAGAGGAAC	TGTTATGGTA	CTAACATAGG	TTCGAATACC	300
TGACCGCTCT	AAACGAGAAA	TGGTTCGGCG	AAAGCCCCCA	CTATTGCTTT	CAATAGTGAC	360
TGTATTTTCT	GCTAGCCCTA	CTCTGGATCG	AGTTCTATTT	GCAATACTAT	CCCGATCTCT	420
ATTTTCTCCA	GGACGGATCC	TTCTCACTTG	AAGGTCCAGT	GTGATTGTTG	GATGTCGTCG	480
TACAGCAGTT	GAGGATCTGC	TGGATTCTTC	TCCTTCTTCT	ACTGTTATTG	TTGACACAAG	540
CCTTGAATTA	GAGAATGGGG	TATATGCAGT	ACCTCTGCGT	TCTCGTTCTC	TATCTTGCTC	600
TAAAAAGACT	CGAG					614

(2) INFORMATION FOR SEQ ID NO:954:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

GAATTCGGCC	TTCATGGCCT	ACAAGGATTT	CAGGATGTTT	TCCTCTGGA	CTGCTCTGTT	60
CTGGGGTGGA	GTCATGTTTT	ACTTGCTGCT	CAAGAGATCC	GGGAGAGAAA	TCACTTGGA	120
GGACTTTGTC	AATAACTATC	TTTCAAAAGG	AGTAGTAGAC	AGATTGGAAG	TCGTCAACAA	180
GCGTTTGTG	CGAGTGACCT	TTACACCAGG	AAAAACTCCT	GTTGATGGGC	AATACGTTTG	240
GTTTAATATT	GGCAGTGTGG	ACACCTTTGA	ACGGAATCTG	GAAACTTTAC	AGCAGGCGCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

```
GAATTCGGCC TTCATGGCCT AGTAGCTATT AATCTGTGGC TATGAAATGA TCAGAAATGC      60
TAAGTGAGAT CAATATTTGT TTGGAAAAAA AATCTTGGGA AACAAACCCAA GGGTTTTTCGC    120
TGTGTGTGTT TTTCTTTTTC TATTTTGTN  NACTTAGTCC TTTAGCTAGT GGATTTAATT    180
TTGTTGTGCC TGCTTCATTT TGCAATAACA ATGCAGTAGA ATTTAAACT  TGGACGCTCG    240
AG                                                                                   242
```

(2) INFORMATION FOR SEQ ID NO:956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

```
GCTGCGCTGT ACTTCAGATA CTTTTTTCGA GGAACATTG TGATTGTGG CATAAAGTAA      60
CTGTCTAAG  GAAATCTTCT GAGAGGATCT GTCATTTTA TGAAAGGGGC AATTAAGGGG    120
AAATGGAAGC AGATCTTTTA AAGAAGGAGC ATTTGAAATT AGCCCAGGAA TCATGTCCGG    180
CGAGTCCTGC TCTTTTGTAC CTGGGCATAA TAGTCAGCCA CACAGAGCTA GAGTTAGTTC    240
AAGAATTGTC TTTCTGATC GTGCTATATT TTTGGAAACA CGCCGTACTC GAG              293
```

(2) INFORMATION FOR SEQ ID NO:957:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

```
GCAAAGAATG GTAACGTGCT TATCATGGGA GTGTTTTGAG AACTTAGCC AAAGCTTCAG      60
CAGAAAAATC CCCGAGAAAG ACCAGAGAGT TCTCACCAC AACAATGTTT CTGCTCATCC    120
CTCTCATCAA ACAAGGCCAT TTGCAAGAG TTTGATGGG AAATCACTAG GCATCCACCC    180
TACAGTCCTG GTTTGGCACC TTCTGACTTT TTGTTTCCTA ATCTTAAAAA AATTTTTCAG    240
GGCAACTCTC GAG                                                                                   253
```

(2) INFORMATION FOR SEQ ID NO:958:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

GAATTCGGCC	TTCATGGCCT	ACAACATCAG	CTCCTGTCTG	GTTCTCCAGC	TGCACGACCT	60
CAAACACAA	CCTCAGCTCT	TCCCCGAGTC	TTCTGCTGCA	TGACCCTCAA	TCTAGAACAT	120
AAGCTCCTCT	CTGGGTGTCC	ACCTGTAGGG	ACCTCAAATT	AGAACGTCAG	CTCCTCCCAG	180
AGTCTTCAGC	TGCATGACCC	TCAATCTTTA	ACATCAGCTC	CTCTCCAGGT	CTGCAGCTCC	240
ATGACCCTAA	AAATACATGA	GCAGCTCCTC	CCTGAATCTT	CAGCTGTACG	ACCCTCAAAC	300
TACAACATCA	GCTCCTGTCT	GCACCTCCAG	CTGCAGGGCC	CTCAAACCTAG	AATATCAGCT	360
CCTCCCCGAG	TCTTCAGCTG	CACGACCCTC	AAACTAGAAC	ATCAGCTCCT	GTACAGATTT	420
CCAACGTAG	GGCCCTCAA	CTAGAACATC	AGCTCCTCCC	CTCGAG		466

(2) INFORMATION FOR SEQ ID NO:959:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 137 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

GGAGCATGTC	CTGTTATTTA	TTTAACTTT	CCATTTTCAT	TTTTTATTTG	GGTAAGATAA	60
TTGCTTATGA	TAAGCCTTGG	GTGTGGAGAG	CCGGTGCATA	CAGAGTGGCG	AGGCAAGCTT	120
CAATCTGCAG	TCTCGAG					137

(2) INFORMATION FOR SEQ ID NO:960:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

GAATTCGGCC	TTCATGGCCT	AGAGCCGCGG	CTCATGCGCG	GTGCACAGAG	GCTTGTTC	60
CATCTGTAA	AACAGGAGGA	GGCCAGCCT	CGTGATGAGG	AATAGCAAGG	AGAGAATTCA	120
GCTCCAGTTC	AAAAGCCTAC	AAAATCTGAG	ACTGTCATTG	CTTTTATAAG	GATTCCAGCT	180
TTCCCTCCTG	GCCAGAAATG	TTCAGCCTGG	ACTCATTTCAG	AAAAGATCGG	GCCCAGCACA	240
GGCAGCGTCA	GTGCAAACCTT	CCCCCACC	GCCTTCCACC	CATGTGTGTC	AACCTTACCC	300
CAGAAGGAAC	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:961:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 470 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

GAATTCGGGC	TTCATGGCCT	ACTCTGCTCA	ACCTGCACAT	CACCCACCAC	AGTCACCAGC	60
ACAAATTCAG	ATGCAACTAC	AGCACGAATT	ACAACAGCAA	GCCGCATTCT	TTCAGCCTCA	120

GTTTCTAAAC	CCAGCCTTTT	TGCCTCATTT	TCCTATGGCC	CCAGAAGCAC	TGCTGCAGTT	180
TCAGCAGCCT	CAGTTTCTCT	TTCCATTFTA	TATACCTGGG	ACGGAGTTCA	GCCTGGGGCC	240
AGATTTGGGC	TTGCCAGGCT	CTGCCACATT	TGGGATGCCT	GGCATGACAG	GAATGGCTGG	300
CTCCTTGCTT	GAAGACCTAA	AGCAGCAGAT	TCAAACCCAA	CATCACGTTG	GTCAAATCA	360
ACTCCAGATA	CTACAGCAAC	AAGCACAACA	ATACCAAGCC	ACACAGCCCC	AGCTGCAGCC	420
TCAAAAACAA	CAGCAGCAGC	CACCACCTCC	ACAGCAACAA	CAAGCTCGAG		470

(2) INFORMATION FOR SEQ ID NO:962:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 603 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

GAATTCGGCC	TTCATGGCCT	AGGAGAANGA	CGTGCTGGTG	AACGTGAACC	TGGTGGATAA	60
GGAGCGGGCA	GANAAAAATG	TGGAGCTGCG	GAAGAAGAAG	CCTGACTACC	TGCCCTATGC	120
CGAGGACGAG	AGCGTGACG	ACCTGGCGCA	GCAAAAACCT	CGCTCTATCC	TGTCCAAGTA	180
TGACGAAAAA	CTTGAAGGGG	AGCGGCCACA	TTCTTCCGCG	TTGGAGCAGG	GCGGCACGGC	240
TGATGGCCTG	CGGGAGCGGG	AGCTGGAGGA	GATCCGGGGC	AAGCTGCGGC	TGCAGGCTCA	300
GTCCTTGAGC	ACAGTGGGGC	CCCGGCTGGC	CTCCGAATAC	CTCACGCCTG	AGGAGATGGT	360
GACCTTTAAA	AAGACCAAGC	GGAGGGTGAA	GAAAAATCCG	AAGAAGGAGA	AGGAGGTAGT	420
AGTGCGGGCA	GATGACTTGC	TGCCTCTCGG	GGACCAGACT	CAGGATGGGG	ACTTTGGTTC	480
CAGACTGCGG	GGACGGGGTC	GCCGCCGAGT	GTCCGAAGTG	GAGGAGGAGA	AGGAGCCTGT	540
GCCTCAGCCC	CTGCCGTGCG	ACGACACCCG	AGTGGAGAAC	ATGGACATCA	GCACACTCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:963:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 415 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

GAATTCGGCC	TTCATGGCCT	ACAACAGCGT	TAGGTTTTTT	TTTNGTTNG	TTNGTTNGTT	60
TNGTTTTTTT	CCAACCCTCT	TCGGATGGA	CGGGGAAAGA	GAGAAAGAAA	AANCGAGGGA	120
AAATCNACAA	AATGTGCGAT	GCAAAGAGTC	GATTTTCGCG	GGGTTTGTC	ACTTCGCCAC	180
TGCCGCACGC	GAATCGACGT	CGTCACGTGA	CGGTCTGCCT	CCGCCCTTAT	TAACTCTCAG	240
CCCAGCGGCG	GTTTCCAGGA	CCTCAGACTT	TTTGCCGAGG	CGGCAGTCCC	TAGACGAAGC	300
GAAGGAGGCG	GCGCCTGCCC	CGCCACAAG	AGCTGCCGCG	CGCGGGTGTT	ATAGCTCCAC	360
CCCATCTGCA	AAGGAAGGGG	GAGCGGAAAG	AGCGGGATCT	AGCGGGGAAC	TCGAG	415

(2) INFORMATION FOR SEQ ID NO:964:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

GAATTCGGCC	TTCATGGCCT	AGCGGGTCTT	CAGACAAGTG	GAAAAGGTGA	GAGAGGAGAT	60
CAGGGCGCAG	AGCCCCGTGG	AGGCTGAGTT	TCCATATGGG	CAACTGAGCA	CATCCTGCCA	120
CTCCACCTC	GTGCCTCAGA	ATNGACACCA	GGTACTCAT	CTGGAGGTGA	CCAAGCAGCC	180
AACCAATCGG	GTCCCTGGA	GGTCTCAAA	TGCCTCCCCA	TACCTTGTTT	CAGACCTCGA	240
G						241

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

GAATTAATAG	CCTGCAGGTT	AATTACTCCC	TGAAGGGTAT	TGTGGAAAAG	TATAACAAGA	60
TCAAGATCTC	TCCCAAAATG	CCAGTATGCA	AAGGACACTT	GGGGCAGCCT	CTCAACATTT	120
TCTGCCTGAC	TGATATGCAG	CTGATTTGTG	GGATCTGTGC	TACTCGTGGG	GAGCACACCA	180
AACATGTCTT	CTGTTCTATT	GAAGATGCCT	ATGCTCAGGA	AAGGGATGCC	TTTGAGTCCC	240
TCTTCAGAG	CTTTGAGACC	TGGCGTCGGG	GAGATGCTCT	TTCTCGCTTG	GATACCTTGG	300
AAACTAGTAA	GAGGAAATCC	CTACAGTTAC	TGACTAAAGA	TTCAGATAAA	GTGAAGGAAT	360
TTTTTGAGAA	GTTACAACAC	ACACTGGATC	AAAAGAAGAA	TGAAATTCTG	TCTGACTTTG	420
AGACCATGAA	ACTTGCTGTT	ATGCAAGCAT	ATGACCCAGA	GATCAACAAA	CTCAACACGC	480
TCGAG						485

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

GAATTCGGCC	TTCATGGCCT	AACGGCTCCC	TCACTTGTGA	ATTAAAGTCA	GACACTGCCG	60
TAAGGTTCCT	CTGGTTCCTG	CTTTGTGGAG	AAAGCTTTCA	GCAGCAATAT	CTGGGATCAC	120
TGGTGTATTA	AATGTCAGGC	CTCGCATCAT	TATTCTGCCC	TGAGCTGATG	GTAAACCGGG	180
CACCCAGCCT	TTTAGCTTTC	ATCCAGCACG	AGGGAACCTG	CCTTCAGATG	TGACACGTAC	240
AAGTCAAAAA	AGCTCAGAGT	CAGCTCCAAC	GTCTATTGGA	TCCCACTCTA	TCGCCTTTAA	300
AAAGGAAAAG	AAAATCGAAA	CGAACTCGAG				330

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC	TTCATGGCCT	AGGGTCGCAG	ACTCAAATGC	CCACAGGGGC	CAGGTTAGGT	60
TAGCGGCTGA	AGCAGTCTGG	GGAGAGGCAA	AAAGCAATGG	CAGGGAGGTG	GGACAGAGGA	120
ATGTGGGCCC	CAAACATATG	GGGCAGCTGC	TACTCAGTGC	CAGCTGTTTC	TCGCCATGGG	180
GGGAAGCGGG	ACCAGAGCCG	CCGGGTCTTC	GGCTTTTTC	AGAGGACGCA	TAACCTCGGA	240
TTGTTATTTG	AACTGTCCTG	ACTTTGGTAA	GACTCTGTGA	CGGTGACAGT	GAAGGAGGCC	300
GACTCATCGT	CAATTTTACA	CAAGTACTCG	CCGGAGTCTT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC	TTCATGGCCT	AGGATGCAGC	CGAAAAGGAT	CGCAAGCTTC	AGGAGAAAGA	60
GAAGCAAATC	GAAGAGCTGA	AGAGGAAACT	GGAACAAGAG	CAGAAGCTCG	TGGAAGTGCT	120
GAAAATGCAA	CTTGAGGTTG	AAAAACGAGG	GCAGCAGCAG	CGGCCCCCTG	AAGCCCAGCC	180
CAGTGCCCCA	GGTCATTCTG	TCAAGTCAGA	TCAGAAGCAC	GGCAGCCTTG	GCTCCTCCAT	240
CAAAGATGAG	GCCTCACTCC	CTGACTGCTC	CAGCTCCAGG	CAGCCCATCC	CAGTAGCCAG	300
CCACGCTGTA	GGCCAGCCCC	TCTCTACAGG	TGGCCAGACC	CTTGTTGCCA	AAAAGGCTGT	360
AGTTATCAAG	CAAGAGGTCC	CTGTGGGCCA	GGCAGAGCAG	CAGAGTGTCT	TCTCGCAGTT	420
TTATGTGAGT	TCCAGGGGAC	AGCCACCGCC	TGCTGTGTTT	GCTCAGCCCC	AGGCTTTACT	480
GACCACGCAG	ACTGCTCAGC	TGCTGCTCCC	AGTGTCCATC	CAGGGCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

GTGCCTCGAG	AAACTGCCTA	TTCAGAAACA	CAGAAACACC	GAGACCTCAA	AATCCCCTGA	60
GAAGGACGTT	CCCATGGTAG	AAAAGAAGAG	CAAGAAACCC	AAGAAGAAAG	AGAAAAACA	120
CAAAGAGAAA	GAGAGAGACA	AGGAGAAGAA	GAAGGAGAAG	GAGAAGAAGG	CTGAGGACCT	180
GGACTTCTGG	CTGTCTACCA	CCCCACCGCC	TGCCCCCGCC	CCCGCCCCCG	CCCCCGTTCC	240
ATCCACGGGG	GAGCTCAGTG	TGAACACTGT	CACTACCCCG	AAGGACGAGT	GTGAGGACGC	300
CAAGACGGAG	GCGCAGGGCG	AGGAGGACGA	TGCCGAGGGG	CAAGACCAGG	ACAAGAAATC	360
TCCCAAGCCT	AAGAACAAGA	AGCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

```
GAATTCGGCC TTCATGGCCT AGCTTACACT GGGCCAAGTG CTGCCAAGG ATTCTCATGT      60
GACATTTTCTT TCAGTCCTGC CGAGGACTTT ATGAGGGAAG CACCCTGTTT TACAGAGGGA      120
AGGGGGCCTA TGGGGTCTAC AGCAGTGAGA GCCTAGAGTT CAGTCTGCGT CTCTCTGATT      180
CCAAAGCCTG TGATTGTGAC TTCCATACTC TCCCTAAGAC ACATTCATAC ATTCAACTGA      240
ATATTTATG AGCACCTACT GTGTGCTAGG GATAGAGCAG TAAATGAATC AGGCAAAAAT      300
TATTTACATT CCACTGGGGC TGACAAACCC AAACAAGGAA GAGGTGTAGT GCTTCGGGTC      360
TCGAG
```

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

```
GCAAAAGTAA TATGATTTGT TTAAATACT CAGTCAACAG GTATTTCCTG AAAATATTTT      60
CCATAGAAAG TAGAATATGG TTCTCCCGAA TAAAACTGA TCCATTTTAC CTTTTTCTTT      120
CCCTTTTGT TNNGGTATTT TTTTCTTT TTTCTTNN GCTTTTTC TTTAACTTTC      180
CAGCCAAAGG CTTCTATGAT CTTGATGCTT TAAATGAAGC TGCTTGGACA AGTGCCACACA      240
GCCAGTTGGT TCCCTGTAAT GTTTGTGGGC GTACCTTCCT GCCAGACAGA CTGATTGTTC      300
ACCAACGATC TTGTAAACCC AAAGCTCTCG AG
```

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

```
GCGCCCTCAC CCCTCCAATC CCCCCTCTGA CCCCCTCTTC CTCACATGGG GTCGGGGGCC      60
TGGGAGTTCA TTCTGGACCA GCCCACCTAT CTCCATTTC TTTTATACAG ACTTTGAGAC      120
TTGCCATCAG CACAGCACAC AGCAGCACCC TTCCCTGAG GCCGGTGGGG AGGGGACAAG      180
TGTCAGCAGG ATTGGCGTGT GGGAAAGCTC TTGAGCTGGG CACTGGCCCC CCGGACGAGG      240
TGGCTGTGTG TTCACACACA CACACACCTC GAG
```

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

```

GAATTCGGCC TTCATGGCCT ACTCTGTCTC AAAAAAAAAAT AGTAAGTTGT GTAAAGAAAA    60
ATATTAATTA TATAATATGG CAGTTCCTAT GAGAGTGTGG CAAAAATCAA GAGGGCTTGG    120
AAGTTTTTTC TTTGCTCTTG CAACTGGCTG GATGCAGTTC ATATATTTT CAACCACTAG    180
GTGGCACCCC AACCTAATTT TTTGCAGTTG TAACCTGGTG GCAGAAGGGG CAGGACTGAT    240
GGCTTGGGCA AGACTGTTAT GCCAAGTTCT CGAG                                274

```

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

```

GAATTCGGCC TTCATGGCCT AGTGAGATAG TACCAGATTT AGAATATAAT TTTATCTTTC    60
TTTAGCAACA AGCCCTAACA ATATCCAAAC TAAATAAAAT CATTACATGA ATTACTTTT    120
TACAATCATT CTCCTAAGGC TCGAG                                145

```

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

```

GAATTCGGCC TTCATGGCCT AGGAAATAAC AGTTATTTCA TCATAAAACA GTCCCTTCAA    60
ACACACAATT GTTCTGCTGA AGAGTTGTCA TCAACAATCC AATGCTCACC TATTCAGTTG    120
CTCTGTGGTC AGTGTGGCTG CATAGCAGTG GATTCCATGA AAGGAGTCAT TTTAGTGATG    180
AGCTGCCAGT CCATTCCCAG GCCAGGCTGT CGCTGGCCAT CCATTCAGTC GATCATCTCG    240
AG                                242

```

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

```

CATGTGCACA CTCGCACATG CACATATGGG CACGTGGGAA GACGGGAGAA GTACTGTCAA    60
AGTATAAGGA ACTGCAGAGG TTGGGATTTA CTGGAAGGGA AGGGAGCACA CTCGAG    116

```

(2) INFORMATION FOR SEQ ID NO:977:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

```

GAATTCGGCC TTCATGGCCT AGCATGGCAA CAGATATGTG GAGCATTGGA GTGTTAACAT      60
ATGTCATGCT TACAGGAATA TCACCTTTCT TAGGCAATGA TAAACAAGAA ACATTCTTAA      120
ACATCTCACA GATGAATTTA AGTTATTCTG AGGAAGAATT TGATGTTTTG TCTGAGTCGG      180
CTGTTGATTT CATCAGGACA CTTTGTAGTA AGAAACCTGA AGATCGAGCC ACTGCTGAAG      240
AATGTCTAAA GCACCCCTGG TTGACACAGA GCAGTATTCA AGAGCCTTCT TTCAGGATGG      300
AAAAGGCACT AGAAGAAGCA AATGCCCTCC AAGAAGGTCA TTCTGTGCCT GAAATTAATT      360
CGGATACCGA CAAATCAGAA ACCGAGGAAT CCATTGTAAC CGAAGAGTTA ATTGTAGTTA      420
CTTCATATAC TCTAGGACAA TGCAGACAGT CAGAACTCGA G              461

```

(2) INFORMATION FOR SEQ ID NO:978:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

```

GAATTCGGCC AAAGAGGCCT AATGATGATG AATAAGTTGG TTCTAGCGCA GTTTTTTTTT      60
TTTCTTGTCT ATAAAGCATT TAACCCCCCT GTACACAACT CACTCGAG              108

```

(2) INFORMATION FOR SEQ ID NO:979:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

```

GATGGCGTCG GGCAGCGGGA CAAAAAATT GGACTTTCGC CGAAAGTGGG ACAAAGATGA      60
ATATGAGAAA CTCCCCGAGA AGAGGCTCAC GGAAGAGAGA GAAAAGAAAG ATGGAAGAAC      120
AGTGCAGCCT GTCAAGCGAG AGCTTTTACG GCATAGGGAC TACAAGGTGG ACTTGGAAATC      180
CAAGCTTGGG AAGACAATTG TCATTACCAA GACAACCCCT CAATCTGAGA TGGGAGGATA      240
TACTGCAAT GTCTGTGACT GTGTGGTGAA GGACTCCATC AACTTTCTGG ATCACATTAA      300
TGGAAAGAAA CATCAGAGAA ACCTGGGCAT GTCTATGCGT GTGGAACGTT CCACCCTGGA      360
TCAGGTGAAG AAACGTTTGT AGGTCAACAA GAAGAAGATG GAAGAGAAGC AGAAGGATTA      420
TGATTTTGAG GAAAGGATGA AGGAGCTCAG AGAAGAGGAG GAAAAGGCCA AAGCGTACAA      480
GAAAGAGAAA CAGAAGGAGC TCGAG              505

```

(2) INFORMATION FOR SEQ ID NO:980:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 314 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

CGAGGGACAT	GAGGCTGAGC	TGGTTCCAGG	TCCTGACAGT	ACTGTCCATC	TGCCTGAGCG	60
CCGTGGCCAC	GGCCACGGGG	GCCGAGGGCA	AAAGGAAGCT	GCAGATCGGG	GTCAAGAAGC	120
GGGTGGACCA	CTGTCCCATC	AAATCGCGCA	AAGGGGATNT	CCTGCACATG	CACTACACGG	180
GGAAGCTGGA	AGATGGGACA	GAGTTTGACA	GCAGCCTGCC	CCAGAACCAG	CCCTTTGTCT	240
TCTCCCTTGG	CACAGGCCAG	GTCATCAAGG	GCTGGGACCA	GGGGCTGCTG	GGGATGTGTG	300
AGGGGGACCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

GAATTCGGGC	TTCATGGGNT	ACTCATTGCT	ACATTGCTAG	TTGACCCGCA	GTTATATTTTC	60
CTTTTTTTCT	TTTAAATAAA	AGGCAAGAGA	AACAATCCGT	TTTGCCCTTT	TCCTACCACA	120
TCTTTGACTT	TTCTGATTCC	TGCAAGTTTA	AGTTAAAAAC	ATCCTACCTT	CAAGCTACAA	180
AATGCAGCAC	ATCCCAGGAC	ATCCCTCACC	TGCTTTGCTT	GTTTATTAGA	CACAAGTGGC	240
TTTGTTTCTA	AAGTTACTGG	GAACCGCTAA	GGATAGTCAA	GGTGGAGAAC	ACAGGGTGGG	300
GTCTCAGAGT	CTGAGGCCTT	GGTTCAGGTT	CCTGATAACA	TTAAATATAG	AAAATACACA	360
GCACAAGGCC	AAACTCGAG					379

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 362 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

GAATTCGGCC	TTCATGGCCT	AGAAGATGGT	AAGGTTGCAA	TCTTTCGGGT	GATGGGAGTT	60
AAGTGTGAAC	AGGAACTGGG	ATTTAAGGGC	CACACTTCAG	GGGTATCCCA	GGTCTGCTTT	120
CTCCCAGAA	CCTATTTGCT	GCTTACTGGA	GGGAATGATG	GGAAGATCAC	GTTGTGGGAT	180
GCAACAGTG	AAGTTGAGAA	AAAACAGAAG	AGTCCCACAA	AACGTACCCA	CAGGAAGAAA	240
CCTAAAAGAG	GAAGTTGCAC	CAAGCAGGGT	GGAAATACTA	ACGCTTCAGT	AACAGATGAG	300
GAAGAACATG	GCAACATTTT	ACCAAAGCTA	AATATTGAAC	ATGGAGAAAA	AGTGAAGTGC	360
AG						362

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 574 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

GAATTCGGCC	TTCATGGCCT	AGGCCACTGA	TATTTTTCTA	AGTTAGCAAG	GCTCACTTGC	60
TTGCTTTCTT	GCCTCCCTTG	CCTCCATCCC	TCTCCCTTCC	TACCTTCTCT	ATTTACCTAT	120
TTCTCTCCCT	CCCTCTCTTC	TCCTCTCTTT	TTTTTCCCC	CGCATATGCA	GCTTTTTGAT	180
TGTACTTGAT	TTATAGAGA	CTGCACAGTT	CCAGCAAGAT	TGGGAGTCAG	GCATGGAGCA	240
GGCATCTCAG	GCTACCAGAA	AGAATTGGTC	ACCTAGACTT	TCAGTCAGGC	ATCCTCGTTT	300
GCATTGTCCT	GTAAGTCAAT	TAGTTGATAA	ATAGTTCCCC	CTTCATCCCT	TAAGTTTTGT	360
TTTTGTTTTT	GTTTTTAATA	TAGGTAAGTG	GGACTCTACC	TAAAATTTTG	CATCATACTT	420
ATGGGTAATA	TCTTTTTCAT	ATATTATTTA	TCAAAGTATG	AAGTTGAGTA	TTTTGCTTGT	480
ACCATTTCAA	TTCTGCATTA	TAGTAGTTCA	TTGTATAACT	GAAAGAAATG	ATTTCTTCAT	540
AAGTGACATT	AAATATGAAC	ATTCATCTCT	CGAG			574

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 274 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

GAATTCGGCC	TTCATGGCCT	ACGATTGAAT	TCTAGACCTG	CCCCCTCCCT	CCATGCCTCA	60
TCCCCCGCCC	CCTCCAGTCA	TGCCGCAGCA	GGTTAATTAT	CAGTACCCTC	CGGGCTATTC	120
TCACCACAAC	TTCCCACCTC	CCAGTTTTAA	TAGTTTCCAG	AACAACCTTA	GTTCTTTTCT	180
GCCCAGTGCT	AATAACAGCA	GTAGTCCTCA	TTTCAGACAT	CTCCCTCCAT	ACCCACTCCC	240
AAAGGCTCCC	AGTGAGAGAA	AGTCCCCACT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 366 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

GAATTCGGCC	TTCATGGCCT	AGATAAGGAG	ACTTCAGAAG	AGAAGCCGCC	AGCTGAGGGA	60
AGTGAGGACC	CTAAGAAGCC	ACCCCGCCCT	CAGGAGGGAA	CAAGATCTAG	CCAGCGAGAT	120
CAGATACTCT	ATCTCTTTGG	GAGAACTGGC	CGAGAAAAAG	AGGAATGGTT	TAGGAGATTT	180
ATTCTGGCAT	CTAAGCTAAA	GTCGGAAATC	AAGAAGTCAT	CGGGTGTCTC	TGGAGGTAAA	240
CCAGGGCTTT	TGCCTGCACA	CAGCAGACAC	AACAGTCCGT	CCGGGCACCT	GACCCACAGC	300
CGCAGCAGCA	GCAAAGGCAG	TGTGGAGGAG	ATCATGTCAC	AGCCAAAGCA	GAGGGAGCTA	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

```

GAATTCGGCC TTCATGGCCT ACTCTCTTCC AACCAAAAGT CTTAATATGG GAATATCCCT      60
CACCACGATC CTAATACTGT CAGTAGCTGT CCTGCTGTCC ACAGCAGCCC CTCCGAGCTG      120
CCGTGAGTGT TATCAGTCTT TGCACTACAG AGGGGAGATG CAACAATACT TTACTTACCA      180
TACTCATATA GAAAGATCCT GTTATGGAAA CTTAATCGAG GAATGTGTTG AATCAGGAAA      240
GAGTTATTAT AAAGTAAAGA ATCTAGGAGT ATGTGGCAGT CGTAATGGGG CTATTTGCCC      300
CAGAGGGAAG CAGTGGCTTT GCTTCACCAA AATTGGACAA TGGGGAGTAA ACACTCAGGT      360
GCTTGAGGAC ATAAAGAGAG AACAGATTAT AGCCAAAGCC AAAGCCTCAA AACCAACAAC      420
TCCCCTGAA AATCGCCCGC AGCATCTCGA G                                     451

```

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

```

GAATTCGGCC TTCATGGCCT AGAGAACTG AGCAAAATA GCTGCCAAGA GAAGAGGGAA      60
CGAGTGCTCG GGGCGGGTTG GAGGCAGATA ACGAGAAGGC AAGAAAATTC TTTGTCTTTG      120
GCTCCTGCTG TCAGCTCAGA GGGGTCATCT TGAGATGAAA AAGAAAAGTC CCCAGCCTTG      180
GGGAAGGAAA GGAGAGGGTG CCCACGCAG ATATGAAGCA AAGCCATTGG CAAGATATTC      240
TCTCTAAGGA GAGCAGCGGT CTTGCCAAG GCATCTTCTA TTGTGTATTG CCGTCATAAA      300
CCCTACCCTT CCATGTAGAT AGCCAGGACT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

```

GAATTCGGCC TTCATGGCCT AAGAGAAACA AAAATGATTT TGCTTTCCAA GCTTGGTTTG      60
TGGCGTCTCC CTCGCAGAGC CTTTCTCGTT TCTTTTTTAA ACTAATCACC ATATTGTAAA      120
TTTCAGGGTT TTTTTTTTGG TTTAAGCTGA CTCTTTGCTC TAATTTTGGA AAAAAAGAAA      180
TGTGAAGGGT CAACTCCAAC GTATGTGGTT ATCTGTGAAA GTTGACAGC GTGGCTTTTC      240
CTAAACTGGT GTTTTTCCCC CGCATTTGGT GGATTTTTAT TATTATTCAA AAACAAAATG      300
AAAAGGTTAT TACTTTTTTT TTTCTGAAA TGCTGACAAT ATGTGATATC TTAATATCTG      360
TAATTCTTAG TGAAAGTTAT GGTATAGTAT AGGTGAAGCT GTAGTGTTTA TATCAATAGA      420
TGTGAATTCA AATGAGCAAT CTAATAATTA TTTACTATTC AATTATGTTA ATTTTCTTCT      480
CTTTGTCTCC CATTGTATCT GCACTCGAG                                     509

```


(2) INFORMATION FOR SEQ ID NO:989:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

```

GAATTCGGCC TTCATGGCCT AGGCTTGTGG GCAGGGCCCG TGCAGGTCAT GGAGCCGGTA      60
GCATCTCAGA GCTGGACAGA GGAGGTAGGC TGGGAGCAGG CCCGTTGGG GACCAGTGGC      120
CCCTGCACAG GAGCCAGAGG GCCTGGGCAG CTGTCTGTCC AGAAAGCATG CAAGACCCCG      180
TGCCACCCGG GCACACAGGG CTGTCGTGTC TAGAAAGAGA TCTCCTGGGG TCACGGGCAG      240
GCAAAGCTGA TTGATTTTGG CCGTGAAGTT TGACCTTGTG ATGGAACCG AGCTCCCAGG      300
GAGTGAGACA AACTGCCTCC CCGTGTCACT GGCCAATAAA CCTGACTTGG TTTTACAGCC      360
CCGAGAAATT GCTCACTAAT AGCCAGACAG ATGCTCCCCC TGCCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 210 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

```

GAATTCGGCC TCATGGCCTA CCCAAATCTG AAGTCTTTGG ATATGTTACT GCTGAAGTTT      60
CTATCACTTC TCACTCCTGG TTCCTTGTTT CCCTGTATGC TTTTTTTTTT TTCCATGAG      120
TTCACCTTTT TAAATTATAG TTCTCAAGG CCTAGGATGC AGGTGTGTTC TTCCATAAAG      180
GGCTATTTTG CCTCTGCCGA GGTCCTCGAG      210

```

(2) INFORMATION FOR SEQ ID NO:991:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

```

GAATTCGGCC TTCATGGCCT AGTAGATAGT ACAAATTC AAGATATCA AAGTGTGTTA      60
AGTTTACCTT TCCACCCACT TTCTCATTTT TGTCTCCCC AGTTCCTTTT GCATTATTCC      120
ACGTATATTC TGTGCATATA TACATTCATA TACATTTATC TGTATGTGTC AGCTTCTTTT      180
TACACAAATG ATACATAAAC ACTGTTCTGG ACCTTCCAAC TTAGAATTAC TGCAAACAGT      240
GTCGTGATGA ATTACCTAAT TCTGTGTATG TGTGTATATT GGTAGAAAAA ATCCCCGAA      300
GTAGAATTGC TAGAACAAAG ATTTATGCAT TTAAATATT CCTTTATTAT AAAACTAATG      360
AAAGTAAACA TGTTGGCTAT GACCACGTAT GCTCTATGCT CAGTTTTTCT AGAGTTGTGT      420
ATGCTTAATA TAGGAGCCTG CCTCGAG      447

```

(2) INFORMATION FOR SEQ ID NO:992:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

```

GAATTCGGCC TTCATGGCCT AGCCCATTTGT TGTTTATTTT GAATTAATTT CAAGCTTACA      60
GAAGAATTAT AAGAATTATA CAAAGAGCCCC TTGTATAGCC TTCATCCAGA TTCCTCATTA      120
ATAGTTATCT CCCCCACACA CGTAATGCAC AGACACTGCA TGCATTTTCC TTTTCTTTT      180
TCTCTTCTTT CTTTTCTTT TTCTCTCTT CCCTTCTCT TCTCCCTCCC CTCCCACCC      240
CTCCCTCCC TTCCTCTCC TTCCCTCCT CCTACTTCAG CCTCTAGAAT AACTAGACTC      300
GAG                                                                303

```

(2) INFORMATION FOR SEQ ID NO:993:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

```

GAATTCGGCC TTCATGGCCT AGGATTGGT AGGGTAACTT GAAACTGAG TTAAATGAGA      60
AAGGTAGAAA AAATTCGTAC TTTTCTCCT CCCCACAAAA AATAAAAAACA GTAAAATCTT      120
TACCAACTGA AAAAGCTGTT GAAATTTTCT GTATGTAAA AAAATGAGCT TTGCAGTAAC      180
TCTTAAAATC ACCTAGCAAA ATAGGAACTA TAATGTGCAT CTTTCTTCA CTAAAACATT      240
TATTGCATCT CTTCTTGATG CTGATGATTG AGGACACACA TTCTGCTTTC CTGGGGCTTA      300
TGGTTTTATA TAAAAACCA AGCAAAGTAG AAAGTATACC TCCTACCAAG GGGCTCGAG      359

```

(2) INFORMATION FOR SEQ ID NO:994:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

```

GAATTCGGCC TTCGGCCTTC ATGGCCTAGA GGAGGACCAA GGCTTCAAAG GCCCTGCCC      60
GCGCGTCCTG CAGGTTCCCA TTGTCCGTGT TAATAGCCTC AGATGGGCAT CAGTTGCCCT      120
GATGGGCTTG GGCTCCACGC CCGGGCTTGC ATGTTTGGCA AAATTACTCA AGAGCATTTT      180
TTTTTTTTTT CTTGAGACT CCGTCTCAA AAAAAAAAAA AAAGAGATCC TCAGCTGTTG      240
TTTCTTGAAT CAGATATTTG GATCACTCTA GCATCCAATC ATGCAGCTCC TAAATATGCT      300
CCTAAATCAT GCAGGTCCAA TCACGCACCT GTTTTACGGT TTATCAATTT GTGCTCATCC      360
TGAATAAAT AAACAAATCC ATGAGCCAAC TGCAGCACCA CTCGAG                                                                406

```

(2) INFORMATION FOR SEQ ID NO:995:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

```

GAATTCGGCC TTCATGGCCT ACCATCTTGG AACCTCCTCC CATGATTGCC TTATTATTTT      60
AAATACATTA ATGTAGATCA ATGAAGAATA AGAAAATAAG CAATTTTATT TTACCTTAAT      120
TTATTCTGTT TCTGATGCTC TTTGTCTCTC TATGTAGGTC TGACTTTTGG ACCTACATTA      180
TTTTCTTTCC CTCCTAGGAA TTTTAAAAAG CATTCTTGTG AAGGCAGGGC TACTGAAAAC      240
AAATTTCCCTC AATATTTGCT TGTCTACAAA AGTCTTTATT TCTCCTTTAC CTTTAAAGGG      300
AAATTTCAACA ACCTACAGAA TTCTAGGTTG GTGGGTTTTT TCCCCCTCAA TCCCTTAAGT      360
ATTTAATTCC TCTCTTCTTG CTTGCATGGT TTGTAAGGAA GAGTCAGATG TAATTTTTAT      420
CTTTGCTTCT GTATGGGTAG GGTGCTTTTT CTCTAGATT TTTTTCAG AGTTTTTTTC      480
TTTATCTTTG ATTTTCTGTA CTTCAAATAT ATTATGCCCA GGTATAGATT GTTTTTGTGTT      540
CTTGTTTTGT TTTCAATTGG CATTGTCTCT GCTTGGTGTT CTCTGAGCTT CCCGGATCTC      600
GAG                                                                                   603

```

(2) INFORMATION FOR SEQ ID NO:996:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

```

GAATTCGGCC TTCATGGCCT ACAGAGAATG AAACATGGAG CTCACATTCT GATGGGGGAG      60
AAATAAAAAT CATATCAGAT GGTGATGAGC TTTTCGGTTT TCTATTCTA TTTATGAAGA      120
ATAAAATAAG GTAATAGAGA TAATGTGATG AAAATTCTAA CATTCTCTAC CTTTCCTGAA      180
TTCTTAATCT ATACCTTCTG TTCTTACATT TTCTACTTAA TTTTATTTAA TACAACCTGT      240
AGCTAAACTT TTATTTTTCT TCACTCCTG ATTCTTAACC CCTATCCATG CTAATTTTTG      300
CCTTCACTAT TCCACAAAAC TTACCCACTG TCGTATTATT ATCTTCTATT AAAAGCCAGT      360
ATTCTCTTTT CAGTTTTTAT CCTTCTTGAT CTACACTGAA CATGATTGCC TTTCTCTCTC      420
TTATATCACT TGCTGCTATC TGCAGTCCAA CTAGCCTCGA G                                                                                   461

```

(2) INFORMATION FOR SEQ ID NO:997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

```

GAATTCGGCC TTCATGGCCT AGTGATTGGT GTACAGACAC AGCCAAACCA TATCATTACA      60
GATATAAATC TCTGAGTAAA TCCGGTGTTT GATTCTTCT AGCTTTTATG CTTATGAGTA      120
GAGGTCTTTC TCCTCTACTC CAAGAATTTT CATAGACACA CCACTTAGTA CTTACGTTTA      180
CCACCATTGT TATTATTTT AAGAATGTAC TACTTTATAT TTTTAAACAT GAAGGACTAG      240
CTCAAAATTT TGTAGCTTCC CCCCCGCCC CAATCTTTT TTTTTTTTTG ACTCCTTTGT      300

```

GATGGGTAGT	GGTTTAAAGA	CAGCAAAACA	TGACCTTAAC	CAGAACACTA	ACTAGCTTTA	360
TACATAATTC	AGCCTATGAA	CATGTATCTG	GCAAGAGAAA	TTCCTGATCT	GTGGTTCGGC	420
AGATCCATGA	GAGCTGCTTC	TCCGGATTTT	CTTGCTGGC	CCCTCTCGAG		470

(2) INFORMATION FOR SEQ ID NO:998:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

TTTAAAGAGA	GTTGCGTAT	TTTCTCCAAA	AGCATTTGTT	GAGTTGGTCA	TTTTGACAGT	60
TAAGTGTCCG	TTTTTACCTG	CATTCTAGG	TGCTAAACT	TACAAGTGTA	TCTCTTGAAC	120
ACAGGCATTG	ATCCTCTACC	AATGAATAAT	TGAGAGAGGT	AGGAATGACT	GATTTTTCTA	180
GTTGTAGTTT	GAAAGATTAA	TTTGATGAAT	TGGAAAGTAT	GGAAACTATT	CTGTTACTAT	240
TGCAAAGAAA	GATTTATTTT	TTTAAAAAAT	TTATTTTAT	TTATTTTATT	TTATTTTTTT	300
GGGCAGGTCT	GGCTCTGTCA	CCCAGGCTGG	AGTGCAGTGG	CAGACTCGAG		350

(2) INFORMATION FOR SEQ ID NO:999:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 266 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GGAGTATTGT	TACAATCACA	TTTGAAGTAC	CAGGAAATGC	AAAGGAAGAA	CATCTTAATA	60
TGTTTTATTCA	GAATCTCCTG	TGGGAAAAGA	ATGTGAGAAA	CAAGGACAAT	CACTGCATGG	120
AGGTCATAAG	GCTGAAGGGA	TTGGTGTCAA	TCAAAGACAA	ATCACAACAA	GTGATTGTCC	180
AGGGTGTCCA	TGAGCTCTAT	GATCTGCAGG	AGACTCCAGT	GAGCTGGAAG	GATGACACTG	240
AGAGAACAAA	TCCATTGGTC	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:1000:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 309 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GTAATGGGAG	ATGGACATCC	ACTGTTTCAT	AAGAAGAAGG	GGAACAGAAA	GAAGCTAGTA	60
GAGCTGGAGG	TGGAGTGCAT	GGAAGAGCCT	AATCACCTTG	ATGTGGACCT	GGAGACCCGG	120
ATCCCTGTCA	TCAATAAGGT	GGATGGTACT	TTGCTGGTGG	GTGAGGATGC	CCCTCGCCGG	180
GCTGAACTGG	AGATGTGGTT	ACAGGGTCAT	CCAGAGTTTG	CTGTTGATCC	CCGATTTCTA	240
GCGTATATGG	AGGATCGCAG	AAAACAGAAG	TGGCAAAGAT	GTAAAAAAA	TAATAAGGCA	300
GGACTCGAG						309

(2) INFORMATION FOR SEQ ID NO:1001:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

```

CACGTCAGGA GAATAGAATG GAAAATTTT ATTCAACAG AAAGAAGTTA ATTTAGAAAA      60
TTAGTTTAAA ATACATTGA AACTTAAAG AGCAAAAAGC ATTTGTAAAC AAACAAAAAA      120
TAAACCAAAA AAACCTGAT GAGGTACTA CTAATAGTAA CTGTAGGAGG CATCTACCTC      180
CCTAGATTGG GGAAAGAAGT AGTGGTTGAA TTATCAGAAC CTAGAAGCAC AGAACAGGGG      240
CCCCTCAGAA TGTGTTCTCA GACTCCTGAG GGAAGGATGC TACCCAGCTA CAGCTGGTTC      300
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1002:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 541 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

```

GAATTCGGCC TTCATGGCCT ACACCCTGCT AATTTTGTG TTTT TTTTG TAAAGGCTGG      60
GTCTCACTAT GTTGCCAGG CAGGGTCTCG CTATGTTGCC CAAGTGGGTC TCGAACTCCT      120
GGGTTCAAGC AATCCTGCCT CGGCCTCCA AAGGGCTGGG ATTACATGCA TGAGCCATCA      180
CATCTGGCCC CCACCCATCT TAAAAGTCAG AAATAAAGC CAGAGCCCCT CCTTGACCTC      240
CTGGCCCCCT CCGCTTTATC ACCCCACCTC TCTGCCTGTC TTTATTGCAA AACCCCCAGA      300
AGGTTATCAG GCTCATGGTC TTCCCTCCTG TCCACACTGC CCCAACTACA CAATGAGATG      360
CCCCATTCC AACTCCCCAG CCTCCTCTGC TGGCGTCTCC TCCTTCCTAA TCTCTGAACA      420
TTGTCCCATC CAAGGGCTCA GTCCCAGGTC CGTTCACCCC TTGTCCACAC TCACCCTGAG      480
AGCTTCCAGT CTGTGGCCTC CATGCCCTGG AATGAGCCCC TGTAAGATCC ACAATCTCGA      540
G

```

(2) INFORMATION FOR SEQ ID NO:1003:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 602 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```

GAAACGCCTC CTGATTTTGT CTTACAATGG AACTTAAAAA GTCGCCTGAC GGTGGATGGG      60
GCTGGGTGAT TGTGTTGTC TCCTTCCTTA CTCAGTTTTT GTGTTACGGA TCCCCACTAG      120
CTGTTGGAGT CCTGTACATA GAATGGCTGG ATGCCCTTGG TGAAGGAAAA GGAAAAACAG      180
CCTGGGTTGG ATCCCTGGCA AGTGGAGTTG GCTTGCTTGC AAGTCCTGTC TGCAGTCTCT      240
GTGTCTCATC TTTTGGAGCA AGACCTGTCA CAATCTTCAG TGGCTTCATG GTGGCTGGAG      300

```

GCCTGATGTT	GAGCAGTTTT	GCTCCCAATA	TCTACTTTCT	GTTTTTTTCC	TATGGCATTG	360
TTGTAGGTCT	TGGATGTGGT	TTATTATACA	CTGCAACAGT	GACCATTACG	TGCCAGTATT	420
TTGACGATCG	CCGAGGCCTA	GCGCTTGCC	TGATTTCAAC	AGGTTCAAGC	GTTGGCCTTT	480
TCATATATGC	TGCTCTGCAG	AGGATGCTGG	TTGAGTTCTA	TGGACTGGAT	GGATGCTTGC	540
TGATTGTGGG	TGCTTTAGCT	TTAAATATAT	TAGCCTGTGG	CAGTCTGATG	CGACCCCTCG	600
AG						602

(2) INFORMATION FOR SEQ ID NO:1004:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

GCGGCAATGA	TACCCACTGC	CAACCAACAA	AAATTGGCTG	CAACCATCCC	CTACCAGGAC	60
CGAGCCCCTA	CAGGTGAGCG	GCTCTGCCAG	GCCCTGGCTC	CTGCCCCGAT	GCACCCAAGC	120
CGGAGCCTGG	GGCAGCTCCT	ACGAGGCTCA	CCAGGGCCCC	AGCAGGATGC	CTGGGTCCCC	180
TGCTCCTGCT	TGGCCAAAGG	GAAGAGGAAG	CAGCAGGCAG	GGGCTGGGGA	GGCCTTCATG	240
AATTACATGA	ATTATCCTTC	TTTTTTTTTT	TTTCCCCTTT	TTTTTTTTTT	TTTTTTTTTT	300
TTTTTTTTTT	TTTTTTTTTT	TGAGANNCCA	NTTNAAAAAA	AAAAGGGGGG	GGTGTCAAGG	360
TTTCATTGAG	AGCTCGAG					378

(2) INFORMATION FOR SEQ ID NO:1005:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

GAATTCGGCC	TTCATGGCCT	ACTGTTTTAT	TTCCCGCTTT	TATTTTGCTT	TTGAAATCTT	60
TTTCCTTGGT	GGATTTGTAC	GTGTCTTCAC	TAGATGCCTC	AAATTAAGTC	TGACCACAA	120
CCTACTCTAC	TTTCTACAGT	GGAGAGACCA	TCCTCCCTGC	CCCAGGGCTG	TCTCCACCCA	180
CCCCCCTTC	CCCACCCGCA	CCCTCGAG				208

(2) INFORMATION FOR SEQ ID NO:1006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

CTGATCTGTG	AACCTTACAC	GAGCAAGGAA	TTATTCCGGG	TTTTGGATAC	ACCCTACTTA	60
CTAAATGAAG	ACTGGGAATA	CTATCTCTCT	GGGAAGCTAT	TTAATAAATC	AAAAATGAAG	120
CTCACTTTTG	AACAAGTTTA	CAGTGACTGC	AAAAAAAATA	GAGGCACTTA	CGGCACTCTT	180

CACCTGCAGA ACAGCTTCAA TATCAGTGAA CATCTCAACA TTAATGAGCA TACTGGAAGC	240
ATAAGCAGTG AATTGGAAAG TCTGAAGGTA AATCTTAATA TCTTTCTGTT GGGTGCAGCA	300
GGAAGAAAAA ACCTTCAGGA TTTTGCTGCT TGTGGAATAG ACAGAATGAA TTATGACAGC	360
TACTTGGCTC AGACTGGTAA ATCCCCGCT CTCGAG	396

(2) INFORMATION FOR SEQ ID NO:1007:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

GAATTCGGCC TTCATGGCCT AGATGGGGGC TAGTTTTTGT CATGTGAGAA GAAGCAGGCC	60
GGATGTCAGA GGGGTGCCTT GGGTAACCTC TGGGACTCAG AAGTGAAAGG GGGCTATTCC	120
TAGTTTTATT GCTATAGCCA TTATGATTAT TAATGATGAG TATTGATTGG TAGTATTGGT	180
TATGGTTCAT TGTCCGAGA GTATATTGTT GAAGAGGATA GCTATTAGAA GGATTATGGA	240
TGCGGTTGCT TGCCTGAGGA AATACTTGAT GGCAGCTTCT GTAGCTCGAG	290

(2) INFORMATION FOR SEQ ID NO:1008:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

GTGGTTCTGA AATCACCCTT CCTTTTCACT CCTCTGCCCT GACTTCCTCT CTCACCATGC	60
TCTCCTGCTC TCCACCTTCA CCCTCTTCAG TGGGATTCTT GCATTTTCAGC CAGAGGGACC	120
TGTCTGCAGC TACCAGATGC TCCCCACCCT GGGAGAGCTC AGCGGCATGT CTGCACATGG	180
GCCTTTTCAG CCTTCTTCAT CCCGCAATTG GAACTGACTT TCCCACTCCC ATCTCACACT	240
TGAGAATCTC TGTTTCTTGT TTCTTGTTT TTATTTTATT TTTATTTTCT CTCCCCCTG	300
GCGGACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:1009:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 391 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

GGANCAGAGT CCAANAGATN AATTATATTC AGAAAACCTCT GTTCAAGATA GGGTATGATT	60
ACAAATTGGA ACAGATCAAA AAGGGATATG ATGCACCTCT TTGCAATCTG TTAGTGTTTA	120
AAAAGGTCAA GGCCCTGCTG GGAGGGAATG TCCGCATGAT GCTGTCTGGA GGGGCCCCGC	180
TATCTCCTCA GACACACCGA TTCATGAATG TCTGCTTCTG CTGCCCAATT GGCCAGGGTT	240
ATGGACTGAC AGAATCATGT GGTGCTGGGA CAGTTACTGA AGTAACTGAC TATACTACTG	300

GCAGAGTTGG AGCACCTCTT ATTTGCTGTG AAATTAAGCT AAAAGACTGG CAAGAAGGCC 360
GTTNTACAAT TAATGACAAG CCAAACCTCGA G 391

(2) INFORMATION FOR SEQ ID NO:1010:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

GGGGAAGAAA GCGTAAGGA TGGTGAAGCT GAACAGTAAC CCCAGCGAGA AGGGAACCAA 60
GCCGCCTTCA GTTGAGGATG GCTTCCAGAC CGTCCCTCTC ATCACTCCCT TGGAGGTTAA 120
TCACTTACAG CTGCCTGCTC CAGAAAAGGT GATTGTGAAG ACAAGAACGG AATATCAGCC 180
GGAACAGAAG AACAAAGGGA AGTTCCGGGT GCCGAAAATC GCTGAATTTA CGGTCACCAT 240
CCTTGTCAGC CTGGCCCTAG CTTTCCTTGC GTGCATCGTG TTCCTGGTGG TTACAAAGC 300
CTTCACCTAT GATCACAGCT GCCAGAGGG ATTCTCTAT AAGCACAAAC GCTGTATCCC 360
AGCCTCCCTG GATGCTTACT ACTCCTCCA GGACCCCAAT CCCAGAAGCC TCGAG 415

(2) INFORMATION FOR SEQ ID NO:1011:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

GCCAGACTAC CACAAGCCCC ACCCACTA TGCCAAGCCC TACCCATACC ACAGCAAGCC 60
CCACTCATAC TTCCACAAGC CCCACCCATA CCCCACAAG TCCCAACCAC AAAACCAGTA 120
TGTCACCTCC CACCACTACA AGTCCTACCC CCAGTGGTAT GGGCCTAGTC CAGACTGCCA 180
CAAGTCCCAC CCATCCTACC ACAAGCCCCA CCCATCCCAC CACAAGCCCC ATCCTTATAA 240
ATGTAAGCCC TTCCACTTCT CTAGAAGTTG CTACCCTCTC CAGCCCTCC AACACTCAG 300
ACCCCAACCCT CCCAGGCACT GACTCCCTTC CTTGTAGTCC CCCAGTCTCC AATTCCTACA 360
CTCAGGCAGA CCCTATGGCC CCCAGAATC CCCACCCAAG TCTCGAG 407

(2) INFORMATION FOR SEQ ID NO:1012:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

GAATTCGGCC TTCATGGCCT ACGCCGCCGC CACAATGGGC CGCGGAGTTT GCGAATCTGA 60
CGCGGATGCG GCATGTGATC AGCTACAGCT TGTCACCGTT CGAGCAGCGC GCCTATCCGC 120
ACGTCTTCAC TAAAGGAATC CCCAATGTTT TCGCGCCGAT TCGGGAGTCT TTCTTTCCGC 180
TGGTGCCGCA GTTTGTAGTG TTTTATCTTA TCTACACATG GGGGACTGAA GAGTTCGAGA 240

GAATCCAAGAG GAAGAATCCC GCTGACCATT GAATTCTAGA CCTGCCTCGA G

291

(2) INFORMATION FOR SEQ ID NO:1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCT	TCATGGCCTA	TGGATTACCT	GAGGAAGAAG	AGATCAAGGA	AAAAAAACCC	60
ACCAAGTCAAG	GAAAGTCAAG	TAGCAAGAAG	GAAATGTCTA	AAAGAGATGG	CAAGGAGAAA	120
AAAGACAGAG	GAGTGACGAG	GTTTCAGGAA	AATGCCAGTG	AAGGGAAGGC	CCCTGCAGAA	180
GACGTCTTTA	AGAAGCCCCCT	GCCTCCTACT	GTGAAGAAGG	AAGAGAGTCC	CCCTCCACCT	240
AAAGTGGTAA	ACCCACTGAT	CGGCCTCTTG	GGTGAATATG	GAGGAGACAG	TGACTATGAG	300
GAGGAAGAAG	AGGAGGAACA	GACCCCTCCC	CCACAGCCCC	GGCAGCTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 596 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GCTCGAGTCG	GATCCTCCCT	GAATGTGGAG	CGATGGGGGG	TTGCACACAG	GCCGTTCTGC	60
CCCAGCAGCT	AACAAGAAAG	ACCCTTGCAT	TCCTCCCTGC	ATCTCTCCCT	TTTGGGTCCT	120
ACTAATGTCT	GTTGAATTTT	TCTTTTCTCC	AAAGCAAAAT	CCTTCTCTGC	ATTTGTCTGT	180
CTTGCTGTGT	TCCCAGAGCC	GCAGGACTCT	CTCCTTGTCT	GGAGTTCCAG	AGAGCCCCCA	240
CTTTCTCTTT	CTAAGCTGTG	TTGTGTGTTT	CCTGGTACAT	TCTAGGTTCC	CCAAAGATAA	300
ACATGACTAA	GGATTGGAAA	GGAGGAAAGG	CCGCGCAGAT	TGTTAATCTG	AAAGTCAATC	360
CCCGGATTTA	GCTCTCAAAA	ATGCTTTATT	TTTGGAGAAA	AGCAATAGAG	TAAGACAGAA	420
GGACTTAACG	CTTGACAGGA	AGTGGCTTTC	TGCCATGTAG	AGCCAGGCTG	GCAACCTGCC	480
CTCTGCCATC	AGGGAGTGAG	CATGAACCTG	GAAACCTCTA	GGACGCAAGA	GCGAGGCTGG	540
CTGTCCCCTC	GTGTGCAGTG	CTTAGACCTT	CTTGCCACAC	ATCCCATCCC	CTCGAG	596

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC	TTCATGGCCT	ACTTGGTTTT	GCTGACCAAC	AAATATGCAT	AGTGTCTATT	60
CACAGTTATA	CAGTAATAGG	TTAGAACAGA	AATAAATGCC	AGCTTCTTAT	GATGCCTTTG	120
CCAACAATCA	GGCCATGTGT	TTCAGGACCC	TTCCTTCCTC	TGACTTGTGT	AGCATTACAC	180

CTCAGCACAC GACTTCTTGA AAGAGTGAAC CTCCAGGGCT TGCTCTCTCA GATGCACCTG	240
GGCAGCAGCA GGAAGTGTCT GACAGTCTCT CCTGTCTCCA TAAAGTAGCG GGCTGGCTCT	300
TTGCTGGGAG TGATGGGAGC CACAGATACG TGCATGGAAG TTAGTGCCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1016:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

GAATTCGGCC TTCATGGCCT AATTATTAAG TAAATAAGG GTTCCTTGAA TATAGGCACT	60
GCAAATACCA TGACAGTGAT CTGATCACTG AGCTAACTAC TGAGTGACTC AGAGGCAGGT	120
GATGTATACT GTGTGGAGTG GAATGGTGAG AGATTTTCATC ACACTACTCA GAATTGCATG	180
AAACTTAAAG CTTATAAATT GTTTAATTCT GGAATTTTTC ACTTAATATT TTCTGACTGA	240
GATTGCCAC GGGTAACTGA AACTGTGGAA AGCGAACTG CAGATAATGG CGGACTCGAG	300

(2) INFORMATION FOR SEQ ID NO:1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

GCGATTGAAT TCTAGACCTG CTCGATCTCA TGGGGCAGAT GAAATTCTCT TCCTTAGAGG	60
AAAGGGAAAG GTGAGGCCCC AGAGGACTTA TCTCAGCTGT ACATGCTCTG CCTGTGGAGA	120
CATGGCTTTT CTTTGTGCTG TGGCAGACTG GGGCTTTGGA AGTGGTGTAT GTTTAACTTA	180
CCTGAGAGTG AGAGATGTGT AGGAAGAATA GCTGGAAGAA AGTGAAAGAT GAGTGCCAGT	240
ACTTTTGGCC TGTATCCAG TAGAGAGAAA GTGACAGTGA AAGTAACGTG AGAGAGAAAG	300
AGTGTGTGTG TATATGTGAG AGAGAGAAAG AAAGAGAAAG GAATGCTTGA TTGCTTGTG	360
TTCACTGGGC CAGCTCTGAA ATCCAAAATC ATGCCTTGAT AACATTACAA AACCGTGATC	420
CTGGGTTTGA GTGAATCCTA GAGACATTGT TCTTATGGCC GCCTGGTTTC CGCAGCATGA	480
TCACCCTCGA G	491

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

GCTTTTCCAT GAAAGGTGGA TCGAGATCTA CTGCCAGTGG GTCAACAGGT TCTAAATTGA	60
AATCAGATGA GTTACAGACC ATCAAGAAAG AATTAACCCA GATCAAACT AAAATTGACT	120
CCTTGCTAGG GCGCCTGGAG AAGATTGAGA AACAGCAGAA GGCGGAGGCA GAAGCTCAGA	180

AGAAGCAATT GGAAGAGAGT CTAGTGCTGA TCCAAGAGGA ATGTGTGTCA GAGATTGCAG	240
ATCACTCTAC AGAGGAGCCT GCTGAAGGAG GGCCAGATGC CGATGGAGAA GAGATGACAG	300
ATGGGATAGA GGTGGACTC GAG	323

(2) INFORMATION FOR SEQ ID NO:1019:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

GGTCACAATC TCCTTGCACT CCAGGACTGG GCATACTCAT ATGCCTTCTG TGGTTGGCGT	60
CCTTGATATT ACCCAGTTT GGTCTGGTT TCCTCTTCA CACTTCCTGT CATTGGCTTA	120
TACCCCTACC TGTGTCATTG GCCTTAACAA GGAATTAAAG ATGCCGAAAG TTCAGTATAA	180
ATCGAACTGT AAACCATCCA CATTGTCATA TCCTGCCCT CTGGAAGTAC CAAAAGAAAA	240
AGAAAAGGAA AAGGTTTCTA CTGCTGTATT ATCTATAACT GCCAAGGCTA AAAAGAAGGA	300
AAAAGAAAAG GAACTCGAG	319

(2) INFORMATION FOR SEQ ID NO:1020:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 450 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

GCGGGCATGG TGTGTAGCCT ATGGGTGCTG CTCCTGGTGT CTTCACTTCT GGCTCTGGAA	60
GAGGTATTGC TGGACACCAC CGGAGAGACA TCTGAGATTG GCTGGCTCAC CTACCCACCA	120
GGGGGGTGGG ACGAGGTGAG TGTCTGGAC GACCAGCGAC GCCTGACTCG GACCTTTGAG	180
GCATGTCATG TGGCAGGGGC CCCTCCAGGC ACCGGGCAGG ACAATTGGTT GCAGACACAC	240
TTTGTGGAGC GGCGCGGGGC CCAGAGGGCG CACATTCGAC TCCACTTCTC TGTGCGGGCA	300
TGCTCCAGCC TGGGTGTGAG CGGCGGCACC TGCCGGGAGA CCTTCACCCT TACTACCGT	360
CAGGCTGAGG AGCCCGACAG CCCTGACAGC GTTTCCTCCT GGCACCTCAA ACGCTGGACC	420
AAGGTGGACA CAATTGCAGC AAGACTCGAG	450

(2) INFORMATION FOR SEQ ID NO:1021:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

GAATTCGGCC TTCATGGCCT ACTAGACCTG CTTTTTGAA GAGAATGCTT TTCACCTGTT	60
CTTTTTTTAA TCCACCTGGC ACTTTCCTCA GGACCCAAAC TTGTTCACTC TGCTGCTTCT	120
TGATGTATCA ATTTTGGGAC ATCACCCTGT GTCTCCTTGC TGTGAATGAT GAGGATTGG	180

CCCATATTAC CCCCGTTCCT TCCCGGTCA TTCTCTCGGT TGCCTTTGTC ACTTTAAATC 240
 ATTTACATAA ACCACAACCTT CTCGAG 266

(2) INFORMATION FOR SEQ ID NO:1022:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 352 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

GAATTCGGCC TTCATGCCTA AGAACTTAT TCGTCTTCAG CATGAGAATA AGATGTTAAA 60
 GCTTAACCAA GAAGGTTTCGG ACAATGAAAA AATAGCCTTA TTGCAGAGCC TTCTAGATGA 120
 TGCAAATCTA CGCAAGAATG AACTGGAGAC AGAGAATAGG CTGGTGAATC AAAGACTTCT 180
 GGAAGTACAG TCACAAGTTG AAGAATTACA AAAATCTTTA CAGGATCAAG GCTCAAAAGC 240
 AGAAGATGCT ATTTCACTCC TTCTAAAAAA GAAGCTTGAA GAACATCTAG AGAAGCTGCA 300
 TGAGGCCAAT AATGAACCTAC AGAAGAAGAG AGCCATTATT GAAGATCTCG AG 352

(2) INFORMATION FOR SEQ ID NO:1023:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 249 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

GAATTCGGCC TTCATGGCCT ACAAAGCCA CCAGGTGAAT AAATGCCATT TTCTTTTTCG 60
 CTAGACATTG TTCATTTACT GAAAATGAAC AAGGTAATGC TCAGCATACA AAAAAAATT 120
 AAAGTTCTCA AGATCCCATG CTTTCTGGAT TCCTCTGTAT TTATCACTCA AGTCATCCCC 180
 CTTTGTGTA TCTCGCTTTT TGTCTCGCT TTATTAAAT CCTTTATATC ACTACCCCA 240
 TCTCTCGAG 249

(2) INFORMATION FOR SEQ ID NO:1024:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

GAATTCGGCC TTCATGGCCT ACAGGAAATA GGCAAAATA CCCAGGAAAA GGAAACAGTT 60
 TTATGCATTA GTGCTGTACC TTCTTCATAT TGTCAAAAAT AAAAGATAGT AGAGATTTAT 120
 TGAAAACATT TTAAATAAAG AAGTTGTGTT CATAATATAA AGCTGCCTTA AACTATATAT 180
 GAAAAAACT GTAAATCATA GAAATAACT TTATCAAAGA TGTTAAATAA TACATTTTAC 240
 AGAATAATTT CCCATGGGCT TCTCGAG 267

(2) INFORMATION FOR SEQ ID NO:1025:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 232 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

GAATTCGGCC TTCATGGCCT AGCCATCTTA TTTGAACTAT ATTTTTCCTT CAAAGAAGCA	60
ATAGGTCTCA ACATAGTGTA GGTAGCATCA GGTGACAGAA AGCCAATTTT ATTTTCAAAT	120
TTAAGTTAAT TATCTTCGTG ATCCTATTTA TCCACAATTT CTTTCAGAAA AGACTGAAAA	180
AACACATTAT ATTCAGGAGA TATAATGAAA TTATTGGAAG GCATCACTCG AG	232

(2) INFORMATION FOR SEQ ID NO:1026:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 153 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

GAATTCGGCC TTCATGGCCT AGATTGAATT AGACCTGCCT CGAGCCCCTA AAAATATCCT	60
AAATGCATTT CCTCCTCTGC ATTCTAACTA CTGCTGCCCT TGTTCAGGA CTCCACTCTC	120
CCACATCAAC CAACTTTTCT CCTTGGCCCC CTC	153

(2) INFORMATION FOR SEQ ID NO:1027:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 294 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

GCGAGGGCCA GGGAGGGAGG AAGCAATAAA TAGGGGGAGA AAATGGCAAT AAGACGTTAT	60
ATAGCCCTTC TAACAAAAAT ACCAGAAGGG AGGGGTGAGG GACAAGGCTG TCTGAGGGAG	120
GGCAGGAGGT GAGGCCATGG CTTGGTCTCT TTGCGCTTG GATGGCCGTC AGCTCAGCAT	180
GAGGCATCTG AAAGAACTAC CCAGATTGCA GAAGAGAGAG GTCCCAGCCT CCTTGGAAGG	240
ACATGATGGG GGAGGAGTGG AGACAACAGC TGAGTGTTAC CTGTAAACT CGAG	294

(2) INFORMATION FOR SEQ ID NO:1028:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 285 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

GAATTCGGCC	TTCATGGCCT	ACACACATAC	CCAACACACA	CACAGACACA	CACATACACA	60
GAATCAACAC	TCAACACGCA	AACACCCAAC	ACACACATGC	ACACACACTT	TCTGAAGATG	120
AGTTTTCTCA	TTTATGAAAT	GAGCTCATCT	GGACTTGCCA	TGAGGGTCCA	ACAGGTGCCA	180
TGCAATCAGG	TGTGCACTCA	GTATGGGCTG	GGTGGAGATG	GCCATCTCCT	TTCCCGTCCA	240
GGCCTGGTTC	CTGTGTGCTG	GGCCTCTGCT	CTTCCCCCCC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:1029:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

GACAAGCTGA	GAAAATGAAA	GGAAACTAG	AAGAATTGTC	TAATCAGTTA	CATCGCAGTC	60
AAGAGGAGGA	AGGAACACAA	AGAAAGGCCT	TGGAAGCCCA	AAATGAAATA	CATACCAAAG	120
AGAAGGAGAA	GCTGATTGAT	AAGATTCAAG	AAATGCAGGA	GGCCAGTGAC	CACTTGAAGA	180
AACAATTGA	AACTGAAAGT	GAAGTCAAGT	GTAACCTCCG	GCAGGAAGCA	TCCCGGCTCA	240
CTTTGGAAAA	CAGGGAAGTC	GAG				263

(2) INFORMATION FOR SEQ ID NO:1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

GAATTCGGCC	TTCATGGCCT	ACCTCCTACA	AATTTAATTT	TTTTATGAAA	TTTTTAGGTG	60
ACTTGTAAT	TCTTCATGTA	TGAGGAGTTG	TGTTTATTAA	TGCTACTTTT	TAAATTTTCC	120
TGTGCCATGT	GGCAGATGTT	TATTCTCTTA	ATGCACTTCA	GGTTTGCTAT	CTGTAAAGCC	180
TTTGACCCAG	GCCTACTGAG	TCAAATCTAC	ATTCAGTGTA	ACATTAAAGG	CAGAAACCTC	240
GAG						243

(2) INFORMATION FOR SEQ ID NO:1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

AATTCGGCCT	TCATGGCCTA	ATTGAATTCT	AGACCTGCCT	CGAGATTACA	GCCAGAGTCT	60
CCTAACTGCT	CTCCATCTAT	TCTCTAATCC	CAATAGCTAC	TCTCCATGCA	GCTGTCAGAG	120

TGGGCCTTAT AAAACATTGG TCAGGTCATG CCAGGCCTCC GATGGCTCCC ATCACACTCA 180
 GGGTAAGAGC CGAAGCCCCA TGTGGGTGTC TAAGGCCCG TGTGATCCTT ACCCACTTCT 240
 CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:1032:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 114 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

GAATTTACAC CTGCCTCGAG TACTCCCATG CCACTTTCAG CACAAATATC ACTTATTATG 60
 TGCTGCTTGA ATATTATTTT CTTTATTTCT AAGTTTGGTC CATTCACTCT CGAG 114

(2) INFORMATION FOR SEQ ID NO:1033:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTGTTGT TCTTTTCTTT TCCATGATAT CATTATATGG ACAGTTTAGG GTGGTCTCAT 60
 GGATTATAAC CATTGGATA TTTGGTTCAC TAACAATTTT CTTACTGGCC AGAGTTCTTG 120
 GTGGAGAAGT TGCATATGGC CAAGTCCTTG GAGTTATAGG ATATTCATTA CTTCTCTCA 180
 TTGTAATAGC CCCTGTACTT TTGGTGTTG GATCATTTGA AGTGGTGTCT ACACTTATAA 240
 AACTGTTTGG TGTGTTTGG GCTGCCTACA GTGCTGCTC ATTGTTAGTG GGAGATCTCG 300
 AG 302

(2) INFORMATION FOR SEQ ID NO:1034:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCGGTC TTCATGGCCT ACCTGAGCAC TCTGCATTTT AATTCTGTGT TCTTCCCTT 60
 TATCTATGTG TTGTCTCTGA GGAAATGTCC TTTAATGTCT TCCTCAGGCT TGATACCTAA 120
 TTTGAGATGG TTCAAACAAT TTTTTCCTTT TCCCTTCACT GGAAGCTTTG TTACTCATTC 180
 TGTTTGCTTT CATACTTTCA AATGCTGTCT TTTTATTTT GGTGGTATTT TTTTCTCTT 240
 TCTCAGGTGT AACATACCTC GG 262

(2) INFORMATION FOR SEQ ID NO:1035:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

```

GAATTCGGCC TTCATGGCCT ACCTACTAGG CATGTTTTAT GACACAGATG ATGCGAGTTT      60
CAAGTGGTTT GATAATTCAA ATATGACATT TGATAAGTGG ACAGACCAAG ATGATGATGA      120
GGATTTAGTT GACACCTGTG CTTTCTGCA CATCAAGACA GGTGAATGGA AAAAAGGAAA      180
TTGTGAAGTT TCTTCTGTGG AAGGAACACT ATGCAAAACA GCTATCCCAT ACAAAGGAA      240
ATATTTATCA GATAACCACA TTTAATATC AGCATTGGTG ATTGCTAGCA CGGTAATTTT      300
GACAGTTTGG GGAGCAATCA TTTGGTTCCT GTACAAAAAA CATTCTGATT CTCGTTTCAC      360
CACAGTTTTT TCAACCGCAA CCCTCGAG                                         388

```

(2) INFORMATION FOR SEQ ID NO:1036:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

```

GAATTCGGCC TTCATGGCCT ACTTTTGTAGT AAAGAGCAAA CTCATAAATT TTGGCATCAG      60
AGTTTGAGCT TTATTTTCT TAAATGAGTT TGAAATCAAT TTAATATTTT TCTCCAATTC      120
CCTAATGTCT CAGAAGTGAA TTTACAGTAT ACCTTTGTTT TTTTCGTATTC TTAAGTAGTA      180
TTTGGATTTT ATTTAGTAGT TGCAGTACTA AATAAGGAGT GGGGAGTTAA TTACAAAACG      240
AATCAGGTGA CTCTCGAG                                         258

```

(2) INFORMATION FOR SEQ ID NO:1037:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 85 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTGA TTTGGCCTGC ATGGTTTTCC TCCTACCCCT      60
TTTCTTTTGC CTGGGTCAGC TCGAG                                         85

```

(2) INFORMATION FOR SEQ ID NO:1038:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

```

GCGATTGAAT TCTAGACCTG CCTCGAGGGG TTTGGAGCTC TGTGGGGTGG TGACCTCAGT      60
CCTGTTTACC CCTGCAGAAG AAGGACCCAG CCCAGTTCCT GCAGGTACAT GGCCGAGCTT      120
GCAAGGTGCA CCTGGATTCT GCAGTCGCCC TGGCCGCTGA GAGCCCTGTT AATATGATGC      180
CCTGGCAGGG GGACACCAAC AACATGATTG ACCGATTCTGA TGTCCGTGCT TAGGCCATGA      240
AGGTCGAG                                     248

```

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

```

GAATTCGGCC TTCATGGCCT AGTCACTTAA ATAGATTGG TGTGAAATTT TATGATAAAA      60
GGTGACTTTT GTTCTAGTAA GTATTCTCAA AGAAAAGAGA GTGAGTAGCT ATTTTGGGAT      120
GAAGATAGTT ATAAGTGAGA TAGCGGTTTT TGTTTTTGTT TTTTGTTTT GGCCAGGCG      180
GAGTGCTGTG GTGCGGTCAT GGCTCACTGT AACCTCAGCC TGGGGTCAAG GTCTGCCCAT      240
CTCAACCCTC GAG                                     253

```

(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

```

GAATTCGGCC TTCATGGCCT AGTTCAAAAA TAAAGCAAAT ATTTATTTTG GTATTGTTTT      60
GAGCACAGCT GATTTTAAAC ATTTTCTTTC ATAACACTCA GAAATCATTA ACAATTGTTT      120
GCTCATTTGG TATGGGTTTT TTGTTCTCTT TTTTTTTTTG GGTCTTTTA GGTGCTTTCT      180
TTTAACATTG GTCATGTTTC ACCCTTTTTT TTTTCATCCC CCCAGTCTCG AG              232

```

(2) INFORMATION FOR SEQ ID NO:1041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

```

GAATTCGGCC TTCATGGCCT ACAAGGACGT TAAAGGCATT TTATTCCAGC GTCTTCTAGA      60
GAGCTTAGTG TATACAGATG AGGGTGTCCG CTGCTGCTTT CCTTCGGAAT CCAGTGCTTC      120
CACAGAGATT AGCCTGTAGC TTATATTTGA CATTCTTCAC TGTCTGTTGT TTACCTACCG      180

```

TAGCTTTT	TA	CGTTCACTT	CC	CCCTTCCAA	CTATGTCCAG	ATGTGCAGGC	TCCTCCTCTC	240
TGGACTTTCT	CC	AAAGGCAC	TGGACCCTCG	AG				272

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAATTCGGCC	TTCAGGGCCT	AGATTAAATC	TCAAGGTGGA	CTAGGAGAGA	ACAAGCAGAC	60
TTCTATAGAA	CAGTGTCTTC	CTTTGGTGTT	GTTTACGATC	AAGAAAAGAA	AACCTTTGAC	120
TGGACACAGT	TCCGCATCAT	TTCCCGTTTG	GACAAGAAGT	CGGATGAGAG	CCTGGAACAG	180
TATTTTATA	GTTTTGTGGC	CATGTGCCGG	AATGTCTGTC	GTCTACCCAC	ATGGAAAGAT	240
GGCGGTCCCC	CAGATACCAC	CATCTACGTT	GAACCCATTA	CTCGAG		286

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GAATTCGGCC	TTCATGGCCT	AGTGTAATCT	TATTGGGAAC	CTAAACTGC	TCTTAAAGTC	60
TTTTTGAAAA	CTCAGACATA	TTTTTGGCAT	TACCTTTTTT	TTATTGGAAA	GGAAAAATGA	120
AAACCTTTCA	TTTTATTAAT	AATTCTATAT	TCCACTCCTG	TATTTTCTTC	TCTTGATGA	180
TGATGGTGAT	ATTATTTCTC	ACTTTTCAAA	ATAATACCCT	GGGACTCGAG		230

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

GATTCGGCCT	TCATGGCCTA	GGGAAAATAA	AAATGTATTC	AGTAGCACGT	GGGTTATGGT	60
TTCTCATAGA	CCAGGGGATA	AGATTAAAAG	TCACTGAAGA	GTGGGAAAAT	GCATGTTGAG	120
AAGATGAGAA	TGGCCTGTAT	TTTCTCCAGG	GGAATCTGTG	TAATGTGCCT	TTCCCTCTC	180
CAATGCCTA	GAACCATGGC	ACTGTGTCTT	ATTTATTTAA	CCGTTGGGCC	GTCTCGAG	238

(2) INFORMATION FOR SEQ ID NO:1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

TAATTCATCT AAGTTGTTGA ATTAGCATAA AGTTTTTAAT AAAATTTTAT GTAATTCCTT	60
TTTAGAGAAC TAACTTTTGA AATTGCTGAT TTTCTGTTT CCGTTTCAAC ATTTTACACA	120
CTGGTAGTTA ATAGTTTTTT CTCTCCAGCT TACTTCGTGT TTGATTACT TTTCTTTTC	180
TGTCTTCTTG AGGTGGAAGC TTAGAGGATT AATGATTCCA TTTCTTTCTA ACGAAATCAC	240
TTAAACTAT AAATTTCACT CCAACTACTT CTTTAGCTAA ATTCCATAAA TTTTACTATG	300
TTGTGTTTCC CTTTTTCACT CCGTCTCCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 429 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

GAATTCTAGA CTGCCATTG TGGGGAGTGG AAGTGGCATG ACCTCAGGAG CCAGTTCTGA	60
GTCCAGGTGA ACCAAAGCTC AGTTTCTTTC ATCTTTGAAC CTGAACCTCT TACCTCCAAG	120
AAAAAGGGCC CAGGAATTTG GGCCTTCTTG TTTATTTGTC CTTCTGCCCC TCTCCCTATC	180
TAACCCCTGG GTAAGGGTGA GCTTGAAGGT GATGGTGACA GTGGCTTCTG TGTGTGTCAG	240
TCCACCCTCC AAGCAATGCT TAGAAACCAG TCCATAAGCC AATTAACACA TCATTTTTCAG	300
GGCAGATTTG CAAGTTCTCA GTTGTTTTACA TGTTCGTTA AGTACTAACC TCCAAATTAA	360
TAAAGCATGA CACATGACAT CACACATTTT ACAATTTGTA CCCAAGCAAA GTTCATGGAG	420
GTACTCGAG	429

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

GCTTGGTAGA CCACATCCAA GGGACGATGA GGTTTCCCAG AGGAGGAGTG GTCACCATGA	60
TCGAG	65

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 498 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

```

GAATTCGGCC AAAGAGGCCT AAATTTGGTT TAATGTGTCA TCAAACCTTG TATTCAGCTA      60
TCTAGAGCCA TTTTCTGGAT TCATGCAATA CATTTTCCCC AAACCCCTTT TATTTTGAAA      120
AAGCTCAAAC ACAGAAAAGT TGAAAGAATA GCGTAAAGAA CATCTGGATG TGGTGCAGGG      180
TCTCATGTTC ATAATCCCAG CACTTCGGAA GGATTATTTT AGACCAACCT GGGCAACATA      240
GTAAGACCCA ATGTCTACAA AAATGTTTAC GGATAACCA GCGGTGGTGG TGAGGTAGTC      300
CCAGCTACTC AGGAGGCTGA GGTGGGAGGA TTGCTTGAGC CCAGGAGTTC AAGGCTGTAG      360
TGAGCAATAA TCACATCACT GCATTCCAGC CTTGAGTAAC AGTGAGACCT GTCTCAAAAA      420
AAAAAAAAAA AACACCAAAA ACAACCAACT GTGTATATCT TGCCTGATA ATCCCCCGAA      480
TTCTAGACCT GCCTCGAG                                     498

```

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

```

GAATTCGGCC AAAGAGGCCT AAGCTGAGAT GGGTGTTAAA AGTTAAGACA CAGCTTAAGA      60
CAGAAGCATT GTAAAACAGG AACAAATACT GGCTTAAACC TGATGTCTCT AACTATATTC      120
CTCTATTTTA AGAATGTTTT AGTATCTGAT AGTTTCATCA GCCTTTCCAT TTTCCAATAT      180
GTGACCTTTA TTCCACCAT GTCCCAAATA AACGAGTCCT AGGATTTCTT AGAAGGTGGA      240
CCTCAATTAT TGTGTCCCTT TTATATATAA GGCAAACATT GCTTTTAAGT TCTGTTGGAA      300
CATGGGAACT TTCACTAGAA TGCTTAGAAT GTTCAGAAAA AATGTCCCAA AGCTCTCTTC      360
TGGTCCATAC AAGACAATCA GAATGTAACA CAGTAGCAGA GGGTGTGGAA CATACACTAG      420
TCATATTTGA TTCTCTCTGT CAG                                     443

```

(2) INFORMATION FOR SEQ ID NO:1050:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 68 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

```

GAATTCGGCT AAAGAGGCCT ACTTCTGGCT ATTTTCAAAT ATATAATATG TTATTGTTAA      60
CTATACTC                                     68

```

(2) INFORMATION FOR SEQ ID NO:1051:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGCAA      60
GACTCTGTCT CCAAAAAAAAA AAAAATTAA AAAAAAAAAA ATTTTTTAAA AAATTTTANT      120
TAANGTAAAT TTAAAAATGT TCAGTGAAAT GGTAAAAAAA AAAAAAGAC GCACAAAATA      180
CCTTCATGTT TCTCATCTCT TTTCCCTTC AGATTCTGCC TTTCTTCAA TTCAGCTCTT      240
CTTTTCCAGT CTTTCAACCA ACCACCACGA CTCTCGAG                                278

```

(2) INFORMATION FOR SEQ ID NO:1052:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

```

CTCGAGGACC AAGGATGAAG AGCATAAGAA GATGAAGATT GTAAACTTGT ATAAAATTAT      60
CTTGGTGAGA AGACAAATTG TAAAGTAGAT ATTTGTAATC TTTTACCACT TTGGGGTTGC      120
TTTTTCCCG GAATTCATCA GAACTTTGAA TTTTTTTTT AAATGGGCTG TTTTAAATGC      180
AGGGGCTTTT CTTCCTAGA AACCCAATTC TAAGCAGAAA AAGNAAAAAN ACACCAAAAA      240
TAAAAAACCC CCCTCGTGCC GAATTNTNGG CTTCGGGGGC CAAATTCGCG CCTCTTTGGC      300
CGAATTC                                         307

```

(2) INFORMATION FOR SEQ ID NO:1053:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGCAG      60
TTAAGATCTG GGTGATTCTT TAGGGAAACG GCTGGTTGAG AGGCTTTGAT GGAATCCCAT      120
TCTCTGCTGT GGCCAGAAGG TGGTGCTAGA GGCCAGTCCC ACTTGATGT GACCCTGGCC      180
TCTGCCAGGA TTCAAACCAC AAAGAACATT TGGAAGTGGG ATGTTTGCTT TGAAGCAGCC      240
TGAAAACAAG TGAAAAGGAA ACCAAGATAA CTCTCTCTCC CTCCGCTGGC AAGGATCAAA      300
AATACCTTGT GCAGGGAAGC CCGAGCCTCG AG                                         332

```

(2) INFORMATION FOR SEQ ID NO:1054:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

GAATTCGGCC	AAAGAGGCCG	GAATTCGGCC	TCGAAGCCAA	GAATTCGGCA	CGAGGCCTCG	60
TGCCGCGCCG	TTTTTTTTTT	TTTTTTTCAC	AGGGGGGCAG	TCGGGATTAT	AATACACTGT	120
AGCAGTTGGC	TGGGGAAAAG	TCTATCAAAT	TCCATGACCA	ATTGGACTTT	TCTCCACCT	180
GTAATATAAA	TAAAATATGT	ACTGTTTCAT	ACTGAATTTT	TTCAATGCAT	TGGGGTTCAA	240
CATAAAAGGC	ACAAATAAAT	AAAAATATCA	TTAAATAAAC	GGAAATTACA	ATTTCAAGTT	300
TCATGTGGAG	TTGTATCTCA	CTGTTTGGTT	ACTTTTTCCA	ATTTAATTG	ACAGACTTAG	360
TAATAGCACA	CAACTGTCCT	ACCCTCGAG				389

(2) INFORMATION FOR SEQ ID NO:1055:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

GAATTCGGCT	AAAGGGTCTA	CGAGGTCAGC	AAGGACGCCC	AAGGAGACTC	AGTCATGAAA	60
GGTGAACGTC	TCCTGTTTTT	CAGTGTGATT	GTCTGTCTCC	AGGTGGTATG	CAGCTGCCCC	120
GACAAGTGTT	ACTGTCAGTC	ATCTACAAAT	TTGTAGACT	GCAGCCAGCA	GGGTCTGGCC	180
GAAATCCCTT	CCCATCCCC	TCCGTCGCTC	GAG			213

(2) INFORMATION FOR SEQ ID NO:1056:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 173 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

GAATTCGGCC	TTTCATGGCCT	AGCGATTCCA	GGTTTTAAAT	AGTTTGTAAG	TTTTTCAGTTT	60
CTACACACTT	TATCATCCAC	TCGTGATTTT	TTAATTAAAG	CGTTTTAATT	CCTTTCTCTG	120
TTTCAGCTGT	TATGCTGAGA	TCCATATTTA	GTTTTATAAG	CTTCCCCCTC	GAG	173

(2) INFORMATION FOR SEQ ID NO:1057:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

GGTCATACTC	TCTCATCCAG	ACTGGAGTGC	ATGGAGTGCA	GTGGCACCAT	CTCGGCTCAC	60
TGCAACCCCT	GCCTCCCAGG	TTTAAGCAAT	TCCCCTGCCT	CAGCCTCCCG	AGTAGCTGAG	120
ATTACAGGCA	CATGCCACCA	TGCCTGGCTA	ATTTTTGTAT	TTTGTAGTAG	GACGGGGTTT	180
CACCATGTTG	GCCAGGCTGG	TCTCGAACTC	CTGACCTCAA	GTGATCTGCT	CACCTCAGCC	240
TCCCAAAGTG	CTGGGATCAC	AGGTGTGAGC	CACTGCACCC	GGCCTAGTTT	CCATTTTTCT	300
GTTGATATTT	ACTTCTATTC	ACTCATTAAG	ACTATATTTT	ATTTCTTTAA	TATATTTTCC	360

CTTAGTTCTT TGAACATATT TATAAGAGCT ATTTTAAAGT ATTTGTCAGT TGAATCTAAC	420
ATCTTTTGGG GCCATTTTCT ATTGACTGCT TTTTCTTGA TGATGAGTCG CATTTTCCTT	480
TTTGCCTATC TAGTAATTTT TAAATTATAT ACTGTACCTT GTGGATGTAT GGTAGAGACT	540
CTGGGGTCTC TCGAG	555

(2) INFORMATION FOR SEQ ID NO:1058:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

GAATTCGGCC TTCATGGCCT AGAATGTTAG AAGGTGCCTG CCGAGGCGGG ACAGAGTGTT	60
CGCTCGCGCT GGAGAAGGCT CTGCTCAGCC CTGAGAGTCC CTTCTGCCC CACCGATACT	120
GGCACTTTAA CAAGGAAGCT GACCGCACAG TGTCCAGACG AATGGCCCC CAGAAGATGG	180
GGAGTTCTGT CCTGCCCTTC TGTGTCTGCG TGACCTCACC CAGCCTAGGA GGGAGGTGCA	240
TTCAGGGTAG ATTTGCCTCT CATTCAAAGT TCTGGGGCTT TGGGTGAAA ACAGCCAGCT	300
TTGGCGCTGC TGGGGAGACT CGAG	324

(2) INFORMATION FOR SEQ ID NO:1059:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 219 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

GAATTCGGCC TTCATGGCCT ACTTGATGCT GCAAAGAACA AGATGCGAGT GAAGATCAGC	60
TATCTAATGA TTGCCCTGAC GGTGGTAGGA TGCATCTTCA TGGTTATTGA GGGCAAGAAG	120
GCTGCCCAAA GACACGAGAC TTAAACAAGC TTGAACCTAG AAAAGAAAGC TCGTCTGAAA	180
GAGGAAGCAG CTATGAAGGC CAAAACAGAG CAGCTCGAG	219

(2) INFORMATION FOR SEQ ID NO:1060:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGGC CTTATGGCC TAGTATTTAT AGCCAAGGAA ACAGGGCTAT GAGTTTGTAC	60
TGTAGGCAGC AGTAGGGAGG GGAATTGGA AGCAGGGGGG AGGGCTCTGC AGTAGTTCAG	120
TTGATGCATA CATAAGGCCT GAATTAGGGA ATTAGGAGAG TGATCATAGG TGTGGAAAGG	180
AGGGGAGGGC TTCCAGGCAC ATTTGGTGTA AAATGGATAC AACTTGGTAA CCTGTACATT	240
GCTACCTTTG CACATTTGGT TTCCCCTGTC TCAAAGGCTC CCTCTTCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:1061:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

```

GAATTCGGCC TTCATGGCCT AAAGAAAACA AACAAACAAA GAGAAAACCC ATGAGCATT 60
TAATTCCTGAC TTTTCTACTT TTCTCCCTAC ATTTAGAATA CTGTGGCACT TTCTGTTATC 120
CAAATGTGTC TCAGTCTCCA TATTTAAGGA CTGTGGGTGA AAAGCTTCTA CCTGGAATTG 180
AAGTGCTTTG GACAGGTCCC AAAGTTGTTT CTAAAGAAAT TCCAGTAGAG TCCATCGAAG 240
AGGTTTCTAA GATTATTAAG AGAGCTCCAG TAATCTGGGA TAACATTCAT GCTAATGATT 300
ATGATCAGAA GAGACTGTTT CTGGGCCCGT ACAAAGGAAG ATCCACAGAA CTCATCCAC 360
GGTTAAAGG AGTCCTCACT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1062:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

```

GAATTCGGCC TTCATGGCCT ACATGAAGCT GAATTACTCT CATCTTATAT CTCTCTGCAG 60
TGGCATATCC TGATGGTGAT TTCCTCTTTT TGTGCCTCAG TTTCACCCCC TATGGAATGG 120
GGATAAACAC TTGCGGCTGG GCATGGTGGC ATGTGCCTGT AGTCCCAGCA CTTTGGGAGG 180
CTGAAGTGGG AAGATTGCTT GAGGCCAGGA ATTTGAGACC AGCCTGGGCA ACATAGTGAG 240
ACACTCTCTC TACAAAAAAA AAAAAGAAAA AAAAAATCAG ATGTGGTTGG TGCATGCTAC 300
TGAGGCGAAA CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1063:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

```

GAATTCGGCC TTCATGGCCT ACTAGACCTG CCAAGCTTTC TTCCTTCATA CTACATATTT 60
CACAAAATTT GCTCGTCAGG TCTGCAAAA TACCCTCCGG CTGCGGCAGG CAGCAAGACG 120
GCCGTTTGTT GCTATTAATT ATGCTGCCAT TAGGGCAGAA TGTAAGATGC TTTTAAATTC 180
TTAACCTTAT ATGTTGTGCT TCTGACCATT TTCTCTTTTC CTCTCTTTCC TTTTTTTTTT 240
GTTTGTGTTG TTGCAATAAA CATAAGTTCT TGTGTACAG CCACTCGAG
289

```

(2) INFORMATION FOR SEQ ID NO:1064:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

```

GAATTCGGCC TTCATGGCCT ACAGAGCTGA GAAATAATTC CCTTGTGTGT TTATAAGTAA      60
GAGTTAAATC CCTCCATTG TAATGTAGCA CCAGATCGAA GTAAACAGAC TATGATTTC      120
GTGCTAGACA CAGCCTTAAG GCAGAAGAAA TTACACTGTC ATGCAAAGGA TATGTAGCTG      180
CTGCTATTTT GGTGCTTGAA TTCTTCGTTG TCACATAGTT GAAGGCAATC CAGATGAGGA      240
AGAGTGTTAA CCAACAAAAA GAGAAAATTC CCTGCACATG GTCTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

```

GAATTCGGCT TTCATGGCCT ACTGGGAGCT ATCTTGTCTA CCTTGAGGTT CCTGAACAAT      60
GAATTCCTAT TAATGAGCAG TCTTCAGTAT TAAAACCACT GTCTTGTCAC CTCATTTTGC      120
ATTACTGTCT TCCGTGGATG TTTCAGTTAC AACTGTAATG TTATTTATAG AACAACTTA      180
ATCCATTAAA GCTAACCTAT TTTTCAATAT TTATGATAAT CTATGTACAT ATATTGTCTG      240
TCCCATATGTA TTTGTAAATA GGTGTATAT AATGTCAGGT TTGGGTCTTG GGTTCAGTG      300
TATATATTCC TGTAAGTTTC TTAAGTGCAT TTTGATGAAT TCACATTATG TAACTATAAG      360
AATTGTCCCA AAAGTACCTG TACAGAAAAT TGAATATTGA AAAATTGACA AATTGTGTAC      420
AAACACTAAA AAAAACTTGT TTAAATTGTA TTTGCAATAA ACAACATCAA ATTTTTCAT      480
GAAATCTGCC TCGAG      495

```

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

```

GAATTCGGCC TTCATGGCCT AAAGATTATA AAGGAAAGGG GGGTAGTTAA GATTTAGAAT      60
TCAAGTTAAA TTTCAGAAAT TGGGGCAGTC AGGCATTTGT ATCTTTTAGG GCAACAAGTA      120
AAACATGTAG AGTGCTTGCT ATCCCACTTC ATAAAGCTTT TACCCAATCT TATTTCTAAA      180
CCTCTGTGCA TTCTTAGTGT CTTCTCATTG TGAAACAGAA AATAAGGAAA AACATTTAAC      240
TTAGTTTTCT AAAATCAGAT AATCCTAAAC AAAAATGTTA GTCAGGGTCA CTAAAAAGTA      300
TTGCACATTT ATATAAATAC AGTCCTTTTA AAATTTGACT TTTAAAAAAC AAAAGACTTT      360
GTACGATATT GTGTTTTTAT TCGGTTTGCA ATATTTTTAT AGTAGCCTTT ATGAACTCAG      420
TATAAGTGCA AGTTGTTTGA AAAGGTGTTT TTATTAGTGC ACAATAGAAT TGTGAGGTTT      480
TCAATAGATG TCATGAGATT CCTCGAG      507

```

(2) INFORMATION FOR SEQ ID NO:1067:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

```

GAATTCGGCC TTCATGGCCT ACTTATTTTT TTCTTTTAAA CAAATAAGCA CACATTCTTT      60
TTAAATAAAG TTTCTCTTCC CCAACCTAAA AGTAGTAATG CTAGAATTG AGCATAGCAG      120
AAAAATATTT AGGAAAATTA AATCCCAAAC AAGAGAGACC ATCTTGGACT GTGCTCACTC      180
GGGTGGAAAG TCGACCCAGG TGCTGTGTG CTTGACAGAG GCGTGGCTGC ATCCGCGTAG      240
CTGACCTTCA GATGGACTGG AGTTAGCACA TTTGTAGTCA TTTTCCAAC CATTCTTTCG      300
TATCTGAGGT ACGTTTTTGA CCTGTTTGTAG TATGTCCTC GCGATCTTGA AGCACACTCT      360
TTCATTACT TAAATATTTT CTGAGCACTC GAG                                     393

```

(2) INFORMATION FOR SEQ ID NO:1068:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

```

GAATTCGGCC TTCATGGCCT AAGGTAATGT GTCAGTGGAT GGAAAAGTTT AGAAAAGATC      60
TGTGTAGGTT CTGGAGCAAC GTTTTCCCAG TATTCTTTCA GTTTTGAAC ATCATGGTGG      120
TTGGAATTAC AGGAGCAGCT GTGTAATAA CCATCTTAAA GGTGTTTTTC CCAGTTTCTG      180
AATACAAAGG AATTCTTCAG TTGATAAAG TGGACGTCAT ACCTGTGACA GCTATCAACT      240
TATATCCAGA TGGTCCAGAG AAAAGAGCTG AAAACCTTGA TACACTCGAG                290

```

(2) INFORMATION FOR SEQ ID NO:1069:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

```

GAATTCGGCC TTCATGGCCT ACTCGACTCA TATTTTATC ATACATTTC AAGTCAGTTG      60
CTGATGTAA TCCATTTC AATGTGGGCA GACTCTCGGG GTAATTTCAA AAAGATGTCT      120
CAACATGTT TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG      180
TGTGGAGACA GGGTCTCACT CTATTGCCCA GGCTGGAGTG CAGTGGTGCC ATCATGGCTC      240
ACTGCAGTCT CGACCTCCA GACTTAAGCA ATCCTTCCA AATAGCTGGG ACTCCAGGGG      300
CACCCACTA CAACTCGAG                                     319

```

(2) INFORMATION FOR SEQ ID NO:1070:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 392 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

```
GAATTCGGCC TTCATGGCCT ACTTCTAAAT GGCAAACAGT TGTCTTGAAG GCACTGTCTT      60
TTTCTACCTA GATGTTGGGT GGAAAAAAAAA AAAAAAAGC TGCCTTTTAT ATAGAAGTTC      120
TTGGGAATAT TTCTCATATA GTGAGATGAA CAGAATGCAA AAGTTTCTT CCTGCAGGAT      180
CTCCCAAAT CTTTCTTGGC TTGAATTTT CTCTCACTT TTTCTTTGA AAAGCTTTGT      240
TCCTTTTGCA CTTTGGAAAA ATAAGTCTTG TTTGTCCTGA CAGCAGAGTG CAAGCATCTA      300
TTGCATCAAA ATTCCCAAGT GGAATAGAAA ACCAATGGTC CTTTTCTGAA TTTCGTTAGC      360
AGTAGCAACA AACATTTTCAT TATAACCTCG AG                                     392
```

(2) INFORMATION FOR SEQ ID NO:1071:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 421 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

```
GAATTCGGCC TTCATGGCCT ACACAATGGG AATCCAAGGA GGGTCTGTCC TGTTCTGGGCT      60
GCTGCTCGTC CTGGCTGTCT TCTGCCATTC AGGTCATAGC CTGCAGTGCT ACAACTGTCC      120
TAACCCAAC TCTGACTGCA AAACAGCCGT CAATTGTTCA TCTGATTTTG ATGCGTGTCT      180
CATTACCAAA GCTGGGTTAC AAGTGTATAA CAAGTGTGTTG AAGTTTGAGC ATTGCAATTT      240
CAACGACGTC ACAACCCGCT TGAGGGAAAA TGAGCTAACG TACTACTGCT GCAAGAAGGA      300
CCTGTGTAAC TTTAACGAAC AGCTTGAAAA TGGTGGGACA TCCTTATCAG AGAAAACAGT      360
TCTTCTGCTG GTGACTCCAT TTCTGGCAGC AGCCTGGAGC CTTTCATCCCT ATACGCTCGA      420
G                                     421
```

(2) INFORMATION FOR SEQ ID NO:1072:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 335 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

```
GAATTCGGCC TTCATGGCCT AATCGGTCAC TGATAGTATG TATTTCTTTA GTAAGAATGT      60
GTTAAATTA CAATGATCTT TTAATAAGAT GATGCAGTTC TGTATTATT GTGCTGTGTC      120
TGGTCCTAAG TGGAGCCAAT TAAACAAGTT TCATATGTAT TTTTCCAGTG TTGAATCTCA      180
CACACTGTAC TTTGAAAATT TCCTTCCATC CTGAATAACG AATAGAAGAG GCCATATATA      240
TTGCCTCCTT ATCCTTGAGA TTTCCTACC TTTATGTTAA AAGTTGTGTA TAATTGTTAA      300
AATCTGTGAA AGAATAAAAA GTGGATCCCC TCGAG                                     335
```

(2) INFORMATION FOR SEQ ID NO:1073:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 362 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

```
GAATTCGGCC TTCATGGCCT ACAAAAATAG GCACAGTTTC AGATGCTTCA GCATATGAGG      60
CATGGATACT TCAATCATTT GCAAAGGGTT CTGCTCAGTA GACTGAATGG AAAAGATGGT      120
CATTGCTCTT TAATGTAATT TTGCAGCTCT CATCAAAGAA AATATCTCCA TGAAATTTAT      180
TGGTAACTGT TTATCTTTGA TCAGTGCAAA CTGAAGTCAA ATATACAAGG TAAACACACA      240
TAAAGATAAG TTCACACATT TCTGTGAATT TTCTAAATGT ACACACTTCT GCAAATTCTC      300
TAAATTCACA AATAACAAAT TTGCATGCAT GCAAGCATAT GTGCACATGT GCACACCTCG      360
AG
```

(2) INFORMATION FOR SEQ ID NO:1074:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 612 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

```
GAATTCGGCC TTCATGGCCT ACCCAGGTGA TCAATGTTTT CAATGCGATC AGTAATAACC      60
ATGTGCTCAT GAATCAGATA GGAAGTGGC AAATAGGTTT CAGCCTTGAT GTTAATAAGT      120
AACTCCAGTA GGTTCCTGGG TGGCATAACA ATGGAAGTGT TCAGAGGGAT CACATAGCAC      180
TTATCCAGGT TAAGATCTAA ATAGGCTGTA AGTTTCTTGT TAAAGTCATG AACAATGTTG      240
GCAGGATCAC TATCTGCAAA CTCTGGGACA GGCACACTGA TAAATCAAC TTCTCTTCTT      300
CAAAGATTTT AATATTTTCT TCAATTGTCT GGTAGAGAGC AGCTGGGGCA TCTGCAGAGG      360
GCTCATTAA GATGACATCA TCTTTGATGT ACTTTATCC ACAGTAGTAC ACGTCATCTG      420
GTTGAAGTGC AAAATATTTG TACAAGTATG CTCCTCCTAG AATAACACCT GCAAGCATAA      480
ATGCTAGTCC AAAGCACATG CACCACCACC ACCCGGCTAA TTTTGTACT TTTAGTAGAG      540
ATGAGATTTC ACCCTGTTGG CCAAGATGGT CTTGAACTCC TGACCTCAAG TGATCCGCCC      600
ACACCACTCG AG
```

(2) INFORMATION FOR SEQ ID NO:1075:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

```
GAATTCGGCC TTCATGGCCT AAGTTTGTGG TCCTCTGAGA ATTCTCTGAA GGAGGAAATG      60
GGTTGACCTA TTTGGTTGCT ATGAAGTAAA AACAATCTTG TTTTCATTTT TTAGTGAACA      120
TCTGGGTTGC ATTTATTATT TCACATTCTG GAGATTCTGT AAAACCACAA TTTGATAATA      180
TGAGGGTTCA TCAAAGCGGT AATTATTGAG CTATTTTAT AGTTGATTCA AGAATTAGGG      240
TGCGGACTCG AG
```

(2) INFORMATION FOR SEQ ID NO:1076:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 151 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

GAATTCTAGA CCTGCCTCGA GTGTGATACC AGCAGCTATG AAGCAAACCTG TATTAACCAA	60
GTCTTTTATT TTCTGTGTTT TGATGCATGA CTTTCATGGC CTTGTCAACC CTAGAGACCC	120
TGCCCTCCC ATAGCTAGCG AACGTCTCGA G	151

(2) INFORMATION FOR SEQ ID NO:1077:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 542 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

GAATTCGGCC TTCATGGCCT AGGAAGTAGT CTAAAAAATT AACAGTTATG GTTTTAATAG	60
GATCTGAAAG ACAATCTTTA AAGAAATGGG AGAAATTGGG GGTATCAGTG AACCTATACC	120
AACCTCTCTT TGTACATAAA TATGGTGATG TAGCTAGATA TAAAAATCAG TGTCTTACTG	180
GCACCATTTA CAGTTTAGAA AACAACTCTT TTCTTAAAAA TGCCCATCTG ATTCTATTT	240
TTAGGAGCTA CTTGGATTTG TATGTATTTT TTCTACGTGA AAATATATGT ACTCTTCACT	300
TTTGTTCAG TACTATAATT GCTCATGCAC TCTTCTCCC CTTTGAGAAC ATTCAGTGAA	360
ATACAACTTC ATCAAAGATT TGCTCAAAGG AGAAGAATCG CATGAGTGTG AAAAGTAGAT	420
GCTCGTAGCC AGAACAGAAA AGGTTACACA TGATCATGGC ACAGAAGATA GGAGGTTTGA	480
CTTGGTGGGC CATAATGTTT ATTATCCTTT TTGAAATAAC AGGGACCAGC AGCACTCTCG	540
AG	542

(2) INFORMATION FOR SEQ ID NO:1078:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 574 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

GAATTCGGCC TTCATGGCCT AGGTTGCCAT TACTTGTGAT GCCTCTGAAT GTGGAGGCTG	60
ACTCTCCCGT CTCTCTGTCC CTCCTACCCC ACGGGGCCGC AGCAAAAGCC ATCCTGGGCC	120
TTGACTGGG CCATGTCTTC AGGAAGATTC CTGAAGAGGA GGGCCCGAAA TACCTGCCTT	180
TATAGGTTCC CAGAGTGCCC TAGAACATTC TTAGATACAT ATTTTTTAAA CAAGTAGGAC	240
TCCACCTTAT TTTCTCCAAT AGTCCCCAAG CAGTACAGGT CACTTGAAGA CATAAACATT	300
CTTCTTGGTT GAGGGATCCA CGCCCTTGTT TCAGAAATGA CACCACAGAA GGCTGTGAGC	360
TCCAGGAGCA TGCGTTGGGA TGTCCGGATG ACCGGGGTTT AAAGGTTTTC CTATTCTCGA	420
TAAAGCCTGT GCGCACTGTA CGGGGAGTGG GGGTGAAGCG TGTTCTCTAC ATAGGCAACA	480

CAGCCGCCTA AGTCACAAAG TCAGTGGTG GCGCTTCGA CCAACATGTG GTGAGCATTC 540
CACGGGCGCA TGAAGTCTGG GTGCTGTGCT CGAG 574

(2) INFORMATION FOR SEQ ID NO:1079:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 284 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGGGGCCAGG CGGCCCGCG GAGTCTGGTA TCCTGAGCTT 60
CGTGAGTTGA GCGCTGCTGC TCCGCGGTGG AGTCACCGCA CCGCTCCCGG GATCATGGTG 120
TTCTACTTCA CCAGCAGCAG CGTTAATTCA TCTGCCTACA CTATTTACAT GGGAAAAGAT 180
AAATATGAAA ATGAAGATCT GATCAAGCAT GGCTGGCCTG AAGATATCTG GGAGAGAATA 240
TAGAAGACAT CCCAAGGAA GTGCTGATGG ACTGTGCGCT CGAG 284

(2) INFORMATION FOR SEQ ID NO:1080:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 359 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GTGAACACCA GAAAATACCC TGCAATTCAG CAGAACCAAA ATCCATACCT GCCCTTTCAA 60
TGGAACACA GAAACTTGGT TCAGTTTTGT CTCCAGAATC GCCAAAACCT ACTCCTCTTA 120
CTCCCCTGGA GCCTCAGAAA CCTGGCTCTG TTGTTTCTCA TGAGCTACAG ACACCTCTTC 180
CTTNTCCTGA GCCTTCAAAA CCTGCCTCTG TTTCTTCTCC TGAACCTCCA AAATCAGTCC 240
CTGTTTGTGA GTCTCAGAAA CTTGCCCCTG TTCCTTCTCC AGAACCACAG AAACCTGCCC 300
ATGTATCTCC TGAGTCAGTA AAGGNTACTA TTNGTAATCC CAAACCCAG ATTCTCGAG 359

(2) INFORMATION FOR SEQ ID NO:1081:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 474 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GCCCGGCAGA TGGGAAACGC ATCATATTCT GATTCTACC TGAAGGAAT TTTGTTGAAA 60
GGGGTTTTCA CCTGTGAGCC TTGGTCTGTC TCGGTAGGTT GGTCAACTTC AGTGGACTGT 120
GGTTGGTTTC AGAGCGCCTG GCTGAGGAGT TCCACTGAGG GGAGCACTGG AGCAGCCCTT 180
TGGCAGAGGC TGAGGAGGGA GATGGACCAG CCCACGCCCTG GCACCTGGCT CCATGGCATA 240
AGGAAAGGGA GATGCTGGCC TCTGTGCTCC TGCTGTCTTT TCCTGTTTCT GTTTGCGTTT 300
GACTTAGTAG CAACCGACAG AGTGGCAAGG GATTGTTCT TCAGCAGTAG ACATCCTTCC 360
ACCCCTGCCC TCAGCCAAGT CTCTTGCTGC CATGCCAATG CTATGTCCAC CCTTGCCCTT 420

CGGCCCAAGA GTGTCCAGCG GTGGCCCACT TTTTCCTCCC ACCACAACCT CGAG

474

(2) INFORMATION FOR SEQ ID NO:1082:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 505 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

GAATTCGGCC	TTCATGGCCT	AATGTGTGTG	GCACAAAGAA	GAAAGTGGAC	TCTACACTGT	60
GTTAGTTAGG	AAAACCAGAA	ATTGGGCCAA	ATTGCCTGTT	TAGTGGGAGA	GATANCTTTT	120
GAGAGCTGTG	ATCCCGCTGG	TGTGGCTGGC	TCTGGGCAGA	TATTTGTATC	TGAAATGACT	180
CATGCTGTGG	GACCCCTCCT	GAGATCTAAC	ACTTACAGTG	GTTTGATCAG	AAATTGCACC	240
ATGCTTGCCA	AGCAACTTTT	GGACTAAAAG	TTGCTGCCCA	CGTATATCAG	GGGAAGAATA	300
TATATATATA	TATATATAGT	ACCTATCTTA	GCATCTGATT	TGTATGACCA	TTACTTCAAT	360
GTAAAATAAT	AAATTGGCTT	TCCAGCTTAA	ACTTCAATTT	CTTGTATATT	ATATGATCAT	420
GAGACAACTT	CCCTGGGCTG	ATCAACAGCA	GGACGCTAAA	AAGATTGAGT	ATCTGAGTCA	480
GGAAGGTAGA	GGGCCAAACC	TCGAG				505

(2) INFORMATION FOR SEQ ID NO:1083:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 481 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

GAATTCGGCC	TTCATGGCCT	ACTACTATTC	AGAGACAACA	GTGACACGGA	CCTATGTGAT	60
GCTGGCCTTA	GTGTGGGGAG	GTGCCCTGGG	CCTGGGGCTG	CTGCCTGTGC	TGGCCTGGAA	120
CTGCCTGGAT	GGCCTGACCA	CATGTGGCGT	GGTTTATCCA	CTCTCCAAGA	ACCATCTGGT	180
AGTTCTGGCC	ATTGCCTTCT	TCATGGTGTG	TGGCATCATG	CTGCAGCTCT	ACGCCCCAAT	240
CTGCCGCATC	GTCTGCCGCC	ATGCCCAGCA	GATTGCCCTT	CAGCGGCACC	TGCTGCCTGC	300
CTCCCACTAT	GTGGCCACCC	GCAAGGGCAT	TGCCCACTG	GCCGTGGTGC	TTGGAGCCTT	360
TGCCGCCTGC	TGGTTGCCCT	TACTGTCTA	CTGCCTGCTG	GGTGATGCCC	ACTCTCCACC	420
TCTCTACACC	TATCTTACCT	TGCTCCCTGC	CACCTACAAC	TCCATGATCA	ACCCTCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:1084:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 389 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

GAATTCGGCC TTCATGGCCT ACCATTTTTTA TTAAACCCAA ATCCATGGAA AATATCATGG

60

AAATGAATAA	GCGTCTAACA	GAAGAAACAAG	CCAGAAAAAC	ATTGAGAGA	GCCATGAAAC	120
TGGAACAGGA	GTTTACTGAA	CATTTCACAG	CTATTGTACA	GGGGGATACG	CTGGAAGACA	180
TTTACAACCA	AGTGAAACAG	ATCATAGAAG	AACAATCTGG	TTCTTACATC	TGGGTTCCGG	240
CAAAAGAAAA	GCTATGAAAA	CTCATGTTTC	TCTGTTTCTC	TTTCCACAA	TTCCATTTC	300
TTTGGCATCT	CTTTGCCCTT	TCCTCTGGAG	TCTTTCTTGA	GTACTGATTT	CATGTTGAAT	360
TGTATCCCAC	ACATCATGGT	CATCTCGAG				389

(2) INFORMATION FOR SEQ ID NO:1085:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

GCGATTGAAT	TCTAGACCTG	CCTCGAGACC	GCCTACGAAT	GGAAATCCAT	AAGAATGAGG	60
CTTGCTCTC	TGAAGTCGAA	GGCAAACAG	GTGGGAGAGG	AGACAGAAGA	CATAGCAGTG	120
ACATAAATCA	TCTTGTAACA	CAGGGACGAG	AAAGTCCTGA	GGGAAGTTAC	ACTGATGATG	180
CAAACCAGGA	AGTCCGTGGG	CCACCCAGC	AGCATGGTCA	CCACAATGAG	TTGATGATG	240
AATTTGAGGA	TGATGATCCC	TTGCCTGCTA	TTGGACACTG	CAAAGCTATC	TACCCTTTGT	300
ATGGACATAA	TGAAGGTACT	CTAGCAATGA	AAGAAGGTGA	AGTACTCGAG		350

(2) INFORMATION FOR SEQ ID NO:1086:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

GCTCCACCAG	CTACTGAGAA	AATGGCCTGT	AAAGATCCAG	AAAAACCCAT	GGAGGCCTGT	60
GCCTCAGCAC	ATGTGCAACC	CAAGCCTGCC	CCTGAAGCCA	GTAGCCTAGA	GGAGCCCCAT	120
AGCCAGAAAA	CAGGGGAGAA	GGTAGTAGCA	GGAGAGGTAA	ACCCACCCAA	TGGCCTGTG	180
GGGGACCCAC	TGAGCCTCTT	GTTTGGGGAT	GTGACATCCC	TGAAAAGCTT	TGATTCATTG	240
ACAGGTTGTG	GTGACATAAT	AGCAGAACAA	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

GCAGAGACTT	AAAGGGTTAA	TAAAAATTGT	AAAGCCAGCA	GAGATTCCAG	AACTAAAAAA	60
GACTGAAACT	CAGACTACAG	GTGCAGAAAA	CAAAGCTAAA	AAGCTTACAT	TGCCTCTATT	120
TGGTGCCATG	AAAGGAGGAA	GCAAATTCAA	ATTAAAAACT	GGAACAGTAG	GGAAGTTACC	180

CCCCAAGCGT CCAGAACTCC CTCCAACCTCT AATGAGAATG AAAGATGAGC CTGAAGTAGA	240
AGAGGAGGAG GAAGAGGAAG AGGAAGAAGA GAAAGAAAAG GAGGAGCAGC TCGAG	295

(2) INFORMATION FOR SEQ ID NO:1088:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 339 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

GAAATGAGGG TCCCTGAAGA AGCTCTTAAG CATGAGAAGT TTACCATTCA GCTTCAGTTG	60
TCCCCAAAAT CTCAGAAATC AGAATTATCC AAATCTGCAA GTGCCAAAAG CATAGATTCA	120
AAGGTAGCAG ACGCTGCTAC TGAAGTGCAG CACAAAACCTA CTGAAGCACT GAAATCCGAG	180
GAAAAAGCCA TGGATATTTT TGCTATGCCC CGTGGTACTC CATTATATGG GCAGCCGTCA	240
TGGTGGGGGG ATGATGAGGT GGATGAAAAA AGAGCTTTTCA AGACAAATGG CAAACCTGAA	300
GAAAAAACC ATGAAGCTGG AACATCAGGG TGCCTCGAG	339

(2) INFORMATION FOR SEQ ID NO:1089:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 433 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

GAATTCGGCC TTCATGGCCT ACTCAAGAAT ACAGGTCTTA CTCGTATAGT CTTTGAACAA	60
TAGGCTGTGT GACTAAAAGA GAGACACAAT CAATTGCTTC CCAGTCAAGA AGCCAGAAAA	120
GCTTCAAAAC CTTTCCCCT CCCTACTCCT TGCCACCGCA CCTAAAAAAA AGAGAAATCT	180
TTTAAGTGT TAAAATCTGT AGGAGTCTTA TGAAGAAGCA GCTTTATGTG TATTCTTTAT	240
GGCATAATAT TAATGCATGA AAATCTGTTG CTTTTTTAAA AATTGTGGCA AAATATACAT	300
AACATAAAT TTATCATTTT AGCTATTTT AATATACAAT TCACTAGCAT TAAGTATTAA	360
TACATTCACA GCACCATTC AACCATGGCC ACCATCATCT CCAGAACTTG ATCTTCTTCA	420
ACGCCCACTC GAG	433

(2) INFORMATION FOR SEQ ID NO:1090:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

GACTGGGTCC ATGGGAGCAA GATTAGTGGC TGCTAACTT GAACCGAAAA GCTTCAAACA	60
TACCCATATA GATAAACCA GACTGCTCAGG GCCCCCCATG GACATAAGTA ACAAGGCTTC	120
TGGGGAGATA AAAATTGCCT ATACTTACTC TGTTAGCTTC GAGGAAGATG ATAAGATCAG	180
ATGGGCGTCT AGATGGGACT ATATTCTGGA GTCTATGCCT CATACCCACA TTCAGTGTTT	240

TAGCATTATG AATTCCCTGG TCATTGTTCT CTTCTTATCT GGAATGGTAG CTATGATTAT 300
GTTACGGACA CCACTCGAG 319

(2) INFORMATION FOR SEQ ID NO:1091:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GTGCAAATTG AGCACATCAT TGAAAACATT GTTGCTGTCA CCAAAGGACT TTCAGAAAAA 60
TTGCCAGAGA AGTGGGAGAG CGTGAACTC CTGTTTGTGA AAAGTGAAG ATCGGCTGCA 120
CTTCCCATCT TTTCCTCGTT TGTCAGCAAT TGGGATGAAG CCACCAAAAG ATCTTTGCTT 180
AATAAGAAGA AAAAAGAGGC AAGGAGAAAA CGAAGAGAAA GAAATTTTGA AAAACAAAAG 240
GAGAGGAAGA AGAAGAGGCA GCAGGCTAGG AAGACTGCAT CAGTTCTTAG TAAAGATGAT 300
GTGGCACCTG AAAGCGGTGA TACTCGAG 328

(2) INFORMATION FOR SEQ ID NO:1092:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GATCATGAAG TCCATCATCC CAGTGGTCAT GGCTGGCATC ATCGCCATCT ACGGCCTGGT 60
GGTGGCAGTC CTCATCGCCA ACTCCCTGAA TGACGACATC AACCTCGAG 109

(2) INFORMATION FOR SEQ ID NO:1093:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCGGCC TTCATGGCCT ACTGGAATTC ATAAGTCTAA ATGGTTCTAT GAGTCTAAAA 60
TTAAAGTGTT AGCAGGGCTG GGCTTCCTTT GGAAGCTCTA GAGAATGATC TGTTCATATA 120
CCTTTTCCAG CTTGTATGAG CTGACTACAT TCCTTAGCTC ATGGCCCTGC TGCCACAGC 180
TTCAAATGAG ACAACACCAA GTTGAGTCCT CTTTAGATCA CATCAATTTA AATCTCCTAC 240
TATTCATATT TCCTGTGAC TCTCCTATGC ATCCTTCCTT CTCTTCAAAG GATCTTTGTG 300
ATTATACTGG GCCCTCTGAA GAATCCATGA TAATCTTATC TCAAGGTGCT TAAGTTAATC 360
ACATTTACAA GATCTCCTTT TCCTCGAG 388

(2) INFORMATION FOR SEQ ID NO:1094:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA .

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

```

GAATTCGGCC TTCATGGCCT AGGTGGCACA TGCCTGTGGT CCCAGTTACT CGGGAGGCTG      60
AGGTGGGAGG ATTGCTTGGG CCCGGGAGGT CAAGGCTGCA GTGAGCCGTG ATCTTGCCGC      120
TGTACTIONCAG CCTGGTGATA GCGAGACCCT GTCTCAAAAA AATGCTTTTA GGGAAATTAA      180
TATGTCCTGT GCCTGTTTAA TCATTGAAAA CATTTTAATA TTTTCAGAGC CATAGAGGGC      240
AGTGAAAAAC AGAGTAGCAG AATTGATTAT ACCAGTACTA TTTATCCAAT GGCTAATACA      300
AATAAGACTC TCAGGGATAA TTCACACGTG CTTCCAAGAA CACTAGATGG CACCAATTAT      360
TTAGGATTCA GACTACCTCA GGGAACAGCT GTCTTCATTC AACAAATATT TATTAAATAA      420
TGAACAAAAC AAAAATATCT GTCATTGTGG AGCAGCTCGA G                                461

```

(2) INFORMATION FOR SEQ ID NO:1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

```

GAATTCGGCC TTCATGGCCT AAACCTATGC AGATGCCTGT GATGAGTTCC TGGATCCCAT      60
TATGAGCACA CTGATGTGTG ACCCTGTGGT GCTGCCATCT TCCAGAGTCA CTGTGGATAG      120
ATCCACCATT GCAAGACATT TGCTCAGTGA CCAAACAGAT CCCTTTAACC GTAGTCCCCT      180
CACCATGGAC CAGATCCGGC CAAACACAGA ACTAAAAGAA AAAATCCAAC GGTGGCTTGC      240
AGAGAGGAAA CAACAAAAGG AGCAACTTGA ATAGATACTG TGAACCTAAC AAACCAAAAAC      300
CAACCCGAGA TCTCGAG                                317

```

(2) INFORMATION FOR SEQ ID NO:1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

```

GCTGCAGCCA ACGCGCAGCT CCACTGGAAG AGGATGGAGA ACCTCAAGGA GGAGGAAGAT      60
GACGACTCCT CCACAGCCTC AGACAGCGAT GTTCTCATCC GGGACAACCTA CGAGCGGGCA      120
GAGAAGCGGC CCATCCTGTC TGTGCAGAGA CGTGGATCTC CCAACCCGTT TGAAATCACA      180
GACCGGGTGG AAATGGGACA AATGGCCTCC ATGTTCTTCA ATAAAGTGGG GGTCAACTTG      240
TTCTATTTCT GCATCATCGT TTACCTGTAT GGAGACCTCG CCATCTATGC TGCTGCCGTG      300
CCCTTCTCCC TCATGCAGGT GACCTGCAGC GCCACTGGCA ATGACTCCTG GCGGCTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:1097:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

```

GAATTCGGCC TTCATGGCCT AGTGAGCCAC CGCACGGGGC CTAACGATGA TGAGAATTG      60
ATGTGACATC TGCAGGATCC CCAGCTAGTC AGCAGCATCT AGAGGGCTAG AACTCTGGCC      120
AGCTGACTGG GCCTTTTGCT AACTGTTTTC TGTCCCCTCT GTGCCGGGGT GTCAC TGAGC      180
TTTGCGGGAC AGGCTGGTCT GTCGTGCCTT CAGCTCAGGG AATGTGGCTC CCGAGCATAG      240
GGCTGGACTG AGAGGCGTTA GGTGAGCCAG AGAAGGCCCTC AGACACAGGG CTTAGAGAGG      300
GCTCCCTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:1098:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

```

GAATTCGGCC TTCATGGCCT ACCTGCAGCT CTACAATATA TTTTCAAAC TCTTGATATT      60
GAGAACAAAG GATACCTGAA TGTCTTTTCA CTTAATTATT TCTTTAGGGC CATA CAGGAA      120
CTAATGAAAA TCCATGGACA AGATCCTGTT TCATTTCAAG ATGTCAAGGA TGAATCTTT      180
GACATGGTAA AACCAAAGGA TCCTTTGAAA ATCTCTCTTC AGGATTTAAT CAACAGTAAT      240
CAAGGAGACA CAGTAACCAC CATTCTAATC GATTTGAATG GCTTCTGGAC TTACGAGAAC      300
AGAGAGGCTC TTGTTGCAAA TGACAGTGAA AACTCTGCAG ACCTTGATGA TACATGATCT      360
CTGAAAGACT AGACTGTCTT ATATTATGAG ATA CTGGAAT GCTGCATGTA AAGCCTTTAA      420
AGCAAAAAAC CTCGAG                                     436

```

(2) INFORMATION FOR SEQ ID NO:1099:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

```

GAGAAGATGC AAGTGGACCA GGAGGAACCA CATGTTGAAG AGCAACAGCA GCAGACACCA      60
GCAGAAAATA AGGCAGAGTC TGAAGAAATG GAGACCTCTC AAGCTGGATC CAAGGATAAA      120
AAGATGGACC TACCACCCCA AGCCAAGAAG GCAAAAGTGA AGACCAGTAC TGTGGACCTG      180
CCAATCGAGA ATCAGCTATT ATGGCAGATA GACAGAGAGA TGCTCAACTT GTACATTGAA      240
AATGAGGGTA AGATGATCAT GCAGGATAAA CTGGAGAAGG AGCGGCTCGA G                                     291

```

(2) INFORMATION FOR SEQ ID NO:1100:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

GAATTCGGCC TTCATGGCCT AGTCATTTTA TAGGTTAAAA AAAGGTCAAA TTGTGACAAT	60
TTCATATGGT ACAATATAAA ATTATATTAA ATATACTCGA G	101

(2) INFORMATION FOR SEQ ID NO:1101:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 492 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

GAATTCGCCT TCATGGCCTA AGAAATACAT AGATCAAGTA AAACCTCCAAC TACTGTAGCT	60
GGAATTTGTA AACTAAGTTT GTAAGACCTC TTTTATTTCC TATGGAGTTA TTCTTTAATT	120
TACAGTTTAT TCTGTAAGTT GGAAGTAAA ATAGAGAAAA TAATAAATCT AGATGTTCTC	180
AGTGTCTTAT TCAGGAACCTT TTTATCCCTC CTCACTAAGG AATTCCTCACT GTGACTTTAA	240
AATAGAACTA AATTACTTGT GTGCATGTAT ATGTCTGTAT TTTTACACA CATGCAAAAA	300
TATACATTGG GGCACGTGT GTGAGAGATA TGAATGTGTG CTTATATAAA AATAGATAAA	360
GGTAACCGAA TGTATTGTAG AAACATGATT TATTTAGTTG AGGGTATTGG AGTTACTTTC	420
TCATTGTCTC TGTGTATAA ATACACCAA TTAATCATTA TGTATCTTA TGTTAAAAGG	480
CTAGCTCTCG AG	492

(2) INFORMATION FOR SEQ ID NO:1102:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

GAATTCGGCC TTCATGGCCT AGGCCTGCGT TAATACTCTT AATTATAGAA ACAATCCTTA	60
ATTAATAAAC AAGTCCTTTC ATTGGAAAAA GAACTAATAC ATTTGTTCT CTCAGTCAAA	120
ATTCTGTTTT TGTGGTTAGA GTAATAAAAT GGTAACACCT AGGGTCTGCC ACGATCATGG	180
TTCTCACTCT GGATTCATTC CCTACCACAT CCTTATTTC CTCCTCTTC CCATTCCTC	240
ACTCACCTC CTCCTTCCT TCCCTCACTC ACCCTCCTCT TCCCCATTCC CTCACTCACC	300
CTCCTCCTTT CCTTCCCTCA CTCACCTCC CCCTTTCCTC GAG	343

(2) INFORMATION FOR SEQ ID NO:1103:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 282 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

```
GAATTCGGCC TTCATGGCCT AACCGGGCAA AAAAAAAAAA AAATCTTAA AGCACTAACT      60
TACTATCAAA TCTCAAGAAA CAGAAGCAAT TTCAAAAAAT CAATACTATC CTTTGGTCA      120
GTAACACTTT CTTCATTCCT AATGTATGAG AACAAATAAGG ACATTTTAGC TCCTTTACTC      180
TTCCTTCATT TAGTGACTTC CACATTTCTC TCACCATTTT TCCAGCCTCT GGGTGTGGTT      240
CTGATGAACC TTAAACTTGA AAGGCACAGG CCAGAACTCG AG                          282
```

(2) INFORMATION FOR SEQ ID NO:1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

```
GCGATTGAAT TCTAGACCTG TCTTACGCTT CCCTTCCTAA GCCTTGTCT ACTCTGCTTT      60
GTCTGCTTTT ATGCTTCTCT CTCTTTTGTG TGAACGGGTC TCTGTCCTCG TCCATGCTTC      120
AAGTCCTAAT TCAAATGCCA CTGTCTTTAT GAAGGGCTCC CTGATTGTTT CAACCAAAAT      180
AAGCTTTTAT TCCTTTGAAC TCGAG                          205
```

(2) INFORMATION FOR SEQ ID NO:1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

```
GAATTCGGAC TTCATGGCCT ACGTTTTTAT TACAAATATT ACATTAACT AAAGCTCACA      60
ACTGTTACTA TGCATCAGGA ATTAACAGTC ATTTCTCAT TGTGTTATTC TCCTATTGA      120
TCACATATAG TGACTATCTC TTTATGGGTT AAATATCAGT TTCTTGCCA GAATTCAAGA      180
TCTGCCCTA ACNAATCCTA CTTCTCCAG TACCCTTACA GCACTCCTAC CCTACTAGTA      240
ACCCTCGAG                          249
```

(2) INFORMATION FOR SEQ ID NO:1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 237 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

```

AATTCTAGAC CTGCCTCGAG ATTGTCTGCC AGTTTAATTC TTAAAACTC AGTTTAGCTG      60
TCCTTTTCTT TGGAACTT TCCCTAATCT TCCCACCAC CTGTTTCATCA ACATATATAG      120
AAGCACATTT ACTCTCTCAT TCTCTCTCTT TCTCTCTCCA AGTCTATGTT AGGTGTTTTA      180
GCGTTTATCA TAGGTTTATG TTTACTTATC TCCCCTACTAG TCTATGAAAT CCTCGAG      237

```

(2) INFORMATION FOR SEQ ID NO:1107:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 313 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

```

GATTTATTAT AAAGCTGCAA AGAAGCTGTT GCACTCAGGA ATGAAAATTC TTAGCCAGGA      60
AAGAATTCAG AGCCTGAAGC AGAGCATAGA CTTTCATGGCT GACTTGCAGA AAACCTCGAAA      120
GCAGAAAGAT GGAACAGACA CCTCACAGAG TGGGGAGGAC GGAGGCTGCT GGCAGAGAGA      180
GAGAGAGGAC TCTGGAGATG CCGAAGCACA CGCCTTCAAG AGTCCCAGCA AAGAAAATTA      240
AAAGAAAGAC AAAGATATGC TTGAAGATAA GTTTAAAGC AATAATTTAG AGAGAGAGCA      300
GGAGAGCCTC GAG                                     313

```

(2) INFORMATION FOR SEQ ID NO:1108:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 467 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

```

GCGAGAACAC CATCACCATG ACAACCAGTC ACCAGCCTCA GGACAGATAC AAAGCTGTCT      60
GGCTTATCTT CTTTCATGCTG GGTCTGGGAA CGCTGCTCCC GTGGAATTTT TTCATGACGG      120
CCACTCAGTA TTTCAAAAC CGCCTGGACA TGTCCCAGAA TGTGTCCTTG GTCAGTCTG      180
AACTGAGCAA GGACGCCAG GCGTCAGCCG CCCCTGCAGC ACCCTTGCCCT GAGCGGAAC      240
CTCTCAGTGC CATCTTCAAC AATGTCATGA CCCTATGTGC CATGCTGCCC CTGCTGTTAT      300
TCACCTACCT CAACTCCTTC CTGCATCAGA GGATCCCCCA GTCCGTACGG ATCCTGGGCA      360
GCCTGGTGGC CATCCTGCTG GTGTTTCTGA TCACTGCCAT CCTGGTGAAG GTGCAGCTGG      420
ATGCTCTGCC CTTCTTTGTC ATCACCATGA TCAAGATCGC GCTCGAG      467

```

(2) INFORMATION FOR SEQ ID NO:1109:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 74 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

```

GAATTGCGGA AACGGTCGTT CCACTCGCTC CAATGTGGCC CCCAGGCACC TACCTGATAG      60
CCATATGGGT CGAG                                     74

```

(2) INFORMATION FOR SEQ ID NO:1110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

```

GAATTCGGCC TTCATGGCCT AGGAATTTAG GAACCAAGAT ACTGGGGTGT TATTGTTTCT      60
AAGCTCTTTC AGTGAACAGA TCTAGGAAAT ACATGTGTGT CCTAATCCAT GAATACACAC      120
TAAATATAAA TTATTTCTGT ATCTATGTCA AGCTAAACCT AAGTTCACAT TGAGGTTTCT      180
GACTTTAATA CAGTCCCACA AGGTTCTGTC TAGCTTTCCT TCCTTGACATA CCTTTGACTT      240
TCCTCTCCAG CTGTGGGAAA CTTGGCTCTC TCCATCCACC ACCCCTTCAC TATTGTGTTA      300
ACCCCTGTAC ATATATAAAG CAGCGTTGGA ACTGTCAACC TGTGTCCCAT GAGAACTTT      360
ACCCACTAGA GTACAGCGTT TATGCAGTTC TTTTGTAGT TTTTATAGAT TATAGCCAAA      420
ACTCGAG                                         427

```

(2) INFORMATION FOR SEQ ID NO:1111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

```

GGTGAACCCG AATCACCGAT GGATGTGGAT AATTCTAAAA ATAGTTGTCA AGACTCAGAA      60
GCAGATGAGG AGACAAGTCC AGGTTTGTAT GAACAAGAAG ATGGTAGTTC CTCCCAAACA      120
GCAAATAAAC CTTCAAGGTT CCAAGCAAGA GACGCTGACA TTGAATTTAG GAAACGGTAC      180
TCTACTAAGG GCGGTGAAGT TAGATTACAT TTCCAATTTG AAGGAGGAGA GAGTCACACT      240
GGAATGAATG ATTTAAATGC TAAACTACCT GGAAATATTT CTAGCCTGAA TGTAGAATGC      300
AGAAATTCTA AGCAACATGG AAAAAAGGAT TCTAAAATCA CAGATCATT CATGAGACAG      360
CCCAAACCTCG AG                                         372

```

(2) INFORMATION FOR SEQ ID NO:1112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

```

GAATTCTAGA CCTGCCTCGA GCTATACCTG TATCCAGTCT TGATGCACAC CAGGCTGGGC      60
ACTTTCCAGA AACTACCTCT AACCTCCAGG GTTCCCTCAT CACTCGAG                      108

```

(2) INFORMATION FOR SEQ ID NO:1113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

```

GAATTCGGCC TTCATGAAGA TTGAGAAGAA GGAGGAAAAA AAGCCTGAAG ACATTAAGAA      60
GGAAGAAAAA GACCAGGATG AGCTGAAACC CGGACCTACA AATCGGTCTA GAGTCACCAA      120
ATCAGGAAGC AGAGGAATGG AGCGGACGGT CGTGATGGAT AAATCGAAAG GAGAGCCCGT      180
CATTAGCGTG AAAACCACAA GCAGGTCCAA AGAGAGAAGC TCCAAGAGTC AGGATCGCAA      240
GTCAGAAAGC AAAGAAAAGA GAGACATCTT GTCGTTTGAT AAAATCAAAG AACAAAGGGA      300
GAGAGAGCGC CAGAGGCAGC GGAACGGGA GATCCGCGAA ACGGAGAGGC GGCGGGAGCG      360
CGAGCAGCGG GAGCGTCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

```

GAATTAGCAA AGGAAATCTC AGATTGCATT TCAAAGATG GTTGCTAGCT GCTGCCGTTT      60
CCTTTGCTAT TTCTGTCGAA TTAGCCGGCA AAATCAGAAG GCCATGTTTG AGCATCTGAG      120
TTATCTTCTG GAGAATAGCA GTGTTGGCCT AGCCTCCCCG TCGATGAGGG GATCCACCCC      180
GCTGGATGTG GCAGCTTCCT CTGTGATGGA CAACAATGAG TTAGCGCTGA GCTTAGAGGA      240
ACCAGACCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

```

GAATTTTTTT TTTTTTTAA GAAAGAAAAC TAGGGCGATG CAATGTCCAG ACAGAAGCCG      60
GGGGCCGGGG CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

GAATTCGGCC TTCATGACGA CCGCGTCCAC CTCGCAGGTG CGCCAGAACT ACCACCAGGA	60
CACCCTCGAG	70

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

GAAAATGAAA AGTTCTGTCT TTGATGAAGA CAAAACCTTTT GTAGCAGAAA CATTGGAAAT	60
GGGTGAGGTT GTTGAAAAGG ATACAACAGA ACTCATGGAA AAACCTGAGG TAACCAAGCG	120
AGAGAAATTA GAGCTGTCAC AGAGACTGTC TGATCTTTCT GAACAATTGA AACAGAAACA	180
TGGTGAGATT AGTTTTCTAA ATGAAGAAGT TAAATCTTTA AAGCAAGAGA AAGAACAAGT	240
TTCAATTGAGA TGTAGAGAGC TAGAAATCAT TATTAACCAC AACAGGGCAG AAAATGTACA	300
GTCATGTGAT ACTCAAGTAA GCTCTTTATT AGATGGAGTT GTGACTATGA CAAGCAGGGG	360
TGCTGAAGGA TCAGTTTCTA AAGTAAATAA AAGTTTGGT GAAGAATCAA AAATAATGGT	420
GGAAGATAAA GTTCTTTTG AAAATATGAC TGTGGAGAA GAAAGTAAGC AAGAACAGTT	480
GATTTGGAT CACTTACCAT CTGTAACAAA GGAATCTTCA CTCGAG	526

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

CGATTGAATT CTAGACCTGC CTCGAGCCGA CCTACTCCAC AGCTGTCCTG ACTGTGTAAG	60
CGAGATGATG ATTAGTGATC AGACGAAAGG ATTCCTGTCA TTGGTAACCC TCTCAAAGTA	120
TTTGGAAGAAC AGTTCAATTT TCATCTATTT CAGAAGCACG CCGTGGTGTC TATTGAGGCT	180
CACCCTCGAG	190

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

GAATTCGGCC TTCATGGCCT ACCATCCTGC ACTCAACCAA TCATCTGATG CTGACTCAGA	60
AGCTCTGTTT GGAGTACCTA ATGATAAGAA TTTACTGTGG GCTTATGCTG TTATCCGTAC	120

```

TTACATGTTT TTAGTTTCTG TCATTTTTTT TTGTCTGTTT TTAAAGAATA GCTCAAAGCA 180
AGAAAAAGCA AGAGCATCTG CTGAGACATT TCGAAGAGCA AAATATCACA ACGCCCTTCT 240
TTGTCTCCTT TTTCTGTTCT TCTTTTTTTA TGTTGGAGCT GAGGTAACAT ATGGCTCTTA 300
TGTTTTCTCA TTTGCAACCA CCCATCTCGA G 331

```

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

```

GAATTCGGCC TTCATGGCCT ACAGATTTGC ATCTTTACAA CCAGAAGCTC AGGGAGAAGT 60
TGAAGGAGGA GGAGAACACA GTGGGTATGT TCAGATTGCT TTTGGGTACC CTTGATCCAG 120
CCACATTGTC TACCCTAGAT GGGTGCTCAT GGTACTTCTT GGTGGCATT CAATAATAGG 180
TTGAGTTGTA TACCGTCTGT CTTTACACTA CATTATGAAA ATGAGATTAT TAAATAAGAA 240
TTTTGATGTA GCTGATAAGC TAGTAGAATT GGCACATGAT CCCTTTTATA CCCAGCCCTC 300
CTGTCTGGTG TGCTTGAGGT AATAATAACC CCTTTTATAC CCAAACCTCG AG 352

```

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

```

GAATTCGGCC TTCATGGCCT ACCAATCTCT TTTACTGAGC ACAATGTGGG TAAAACTGCT 60
CTCTATAGTA GCAGAATTTT GTTTTTCCCC TTTCCTAGTT ACTGATGAAG AGACAGCTTC 120
AGATGCTCTG GAGAGAAACT CTCTATCCTC TCAAGACCCA CAGCAGCCCA CCAGTACTGT 180
CTCAGTAACG GAAGATTCTA GTACATCGGA GATTGACAAG GAAGAGAAAG AACAAACCAC 240
TCAAGATCCT GACTTGACCA CCGAAGCAAA TCCTCAGTAT TTAGGACTGG CAAGAAAGAA 300
AAGTGGCATC CTGCTGCTCA CGCTGGTGTC CTTCTCATT TTCATACTCT TCATCATAGT 360
CCAGCTCTTC ATCATGAAGC TGAGGAAAGC ACATGTGATA TGAAGAGAG AAAACGAAGT 420
TTCAGAACAC AACTAGAAA GTTACAGATC AAGGTCAAAT AATGAAGAAA CATCATCGCT 480
CGAG 484

```

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

```

GAATTCGGCC TTCATGGCCT ACTTATGTTT TTCTCATTG TTGACCTAAA TGATCTTTAT 60

```

```

CCAAACTATT CCAAAATCTG AATTTCTGGG TCCTTCTTTT TTTAAATAT TCTGTTCAAT 120
ATTAAACAAA CAAACGTTG AGAACATGAG TAACCTTTTG ACTTTATCCC GTATCTGTTT 180
GCTAATGTTT TGTTCATGT CTTTCTGTG AGAACACACT GTTGCAGCAG CTAGGAGTGC 240
ACTCGAG 247

```

(2) INFORMATION FOR SEQ ID NO:1123:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

```

GAATTCGGCC TTCATGGCCT AGGAGGAAGC TAATAAGAGA CTGTCAAGAT TGTATACCTT 60
CTTGGTTTCT TTTAAGAATT TGTTCCTTT CTACTATTAC AGCAAAGCAG CATTTTGTTA 120
CTGACTGCCT AAAATCACTT AATCTCAGT GAACGCATCA CTGCCAAAC TGTTGGAATG 180
CTATTTGTGT TTTGTTGCAC TGTTTTTTC GTTGTGTTGT TTGTTTATTT GGTTGGCTTT 240
TTGGAGAGGG AAATTTGGAA ACGGGACACA CTCGAG 276

```

(2) INFORMATION FOR SEQ ID NO:1124:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 252 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

```

GAATTACTAG CAGAGATCAG TGCTATAAGG GAAAAGGAGA TTGATTTGAA AGAACTGGA 60
AAAAGAGACA TTCCCATGAT GGAGAAAGTA TCAGGAAAGA TGGCTGTTGT TGAAGAAATG 120
GAGGCAGATT TGAAAGAAAC TGGAAAAGAA AATTTTAGAG AGAGAGGATC TGAAGAGATC 180
TGTGTTACTG AGGAAAAGGT GGCAGAATTG AAACAACTG GAAAAACAGA CATTTCTCCA 240
AGGGCCCTCG AG 252

```

(2) INFORMATION FOR SEQ ID NO:1125:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

```

GAATTCGGCC TTCATGGCCT AAACAGAATA TTCTGAGGCT AAAAGAAAAT ACACCCCGC 60
AAAAATCAAT ATAATATGA TTAAGTACAC AAAACATGCA GCCCATAAAA CATATTTTAC 120
CTATGAACT GAGACTGAGG AATTTAACAG TAAACAGTCA TTTGTTAAAG AAATATTTT 180
ACAATTTATT GCCTATGTAT AAGGCAGCAG GCCTGTACTC TCTTGTTATT TCAATCTCTT 240
CCCCTACTCT GGCTCTTCCT CAGCATATAA ATATGTTTCT ATCCCTACCT TATGGAAACC 300
ATCCCCATC CCTCGAG 317

```

(2) INFORMATION FOR SEQ ID NO:1126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```

GAATTCGGCC TTCATGGCCT ACTTTGTAAC TGTGAAATAC TCTCCAGGAT TTAAAAGGCT      60
GTGGAGCTCC AGATAAAGAA TCGTTTATCT TTCTTCTGAA GAAATTCCTT TGGTTACAAG      120
TTTACCCCAT AAACGGCAAC ACACTCACCT CCATCCAAGA CAGACTCAAG GTGGAGGAAG      180
CGTGGAAATG TGCTTCCGGA CAAAGCTCTC AGTATCCTGG GTGCCATTGT TTCTTCTACT      240
CAGCCGTGTT TTTTCTACTG AGACAGACAA ACCCTCAGCC CAGGACAGCA GAAGCCGTGG      300
GAGTTCAGGC CAACCGGCAG ACCTGCTACA GGTTCCTCTCT GCTGGTGACC ACCCACCCCA      360
CAACCACTCA AGAAGCCACT CG

```

(2) INFORMATION FOR SEQ ID NO:1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```

GAATTCGGCC TTCATGGCCT ACAGACTTCT GTGTGTGGGA CTGAAGCACC TGTTGTGCAA      60
TCTGAAGAAG CTCTGGTTGG TCAGCTGCTG CCTCACATCA GCATGTTGTC AGGATCTTGC      120
ATCAGTATTG AGCACCAGCC ATTCCCTGAC CAGACTCTAT GTGGGGGAGA ATGCCTTGGG      180
AGACTCAGGA GTCGCAATTT TATGTGAAAA AGCCAAGAAT CCACAGTGTA ACCTGCAGAA      240
ACTGGGGTTG GTGAATTCTG GCCTTACGTC AGTCTGTTGT TCAGCTTTGT CCTCGGTACT      300
CAGCACTAAT CAGAATCTCA CGCACCATCT CGAG

```

(2) INFORMATION FOR SEQ ID NO:1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```

GAATTCGGCC TTCATGGCCT AGTCTGTCCA TCTGCTTTCT CTGGACCTCC TTCTCATACT      60
TTGAATTTT TAAGTAGTTT GTCCCTCATA TGATTTTTTT TCTATTCCTT TTTCCCTTCC      120
TGTCCTTCCT TCACTCCTTT CCTCCCACC TCCCTCCCTC CCTTCCTCTC TCCCTTCCTT      180
CCTTCCTTCC ATCCAACCAT CCATCCATCC ATCCATCCAT CCATCCATCC ATCCATCTAT      240
CCACTCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:1129:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 372 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

```
GAATTCGGCC TTCATGGCCT AATTTTCATGT NCCTTTGAGC TATCTTTCCA TTTGTAGGA      60
ACACCGTCAC AGGAGACAAT TTCATGGACC TTTGAGCTGT CTTTCATTT TGTGGGAACG      120
CCGTCACAGG AGACAATTTC ATGTGCCTTT GAGCTGTCTT TCTATTTTGT AGGAACGCTC      180
TCAGAGGGGA CAATTTTCATG TGCCTTTGAG CTGTCTTTCC ATTTTGTAGG AACACTCACA      240
GCAGTGCTTG GGGTTCCTG TACCTAAAT CCCATGATGG GTGAGAAGAC TGAATGGGAC      300
GTTTATTTTT TGTGTTAAAA AGCCACGCA AATAGAGTTT AAAATAGTCT CAGTGAGCTG      360
GGCATTCTCG AG                                     372
```

(2) INFORMATION FOR SEQ ID NO:1130:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 275 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

```
GAATTCGGCC TTCATGGCCT AGTGCCTAGT TACAAGGTTT TATTACAGCA GTATTTCTAA      60
ACATTTGGTT AGTCTGTCTC TGCTTTTCCC ACCATAATTT TCTAGCACTT GTAGCTCACC      120
TTATCTCCCA CTTCCCTTTT TAAATAGAAA ACAGGCTTGT TCTGTTTTGA CCAGGTATAA      180
CTCTTTGCTC AGACTGTCTC TAAAGCCCAG AAAACTATTC CTCTAGTGGT CCAATGAAGT      240
GTTCCCCATT GAAAGTTTGC CTCATGTCAC TCGAG                                     275
```

(2) INFORMATION FOR SEQ ID NO:1131:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 388 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

```
GAAAATTGAG CCTATGTTGG AGACACTGGA GAATCTTTCC TCTCGCCTGC GTATGCCACC      60
ACTGATCCCT GCTGAAGTAG ACAAGATCAG AGAGTGCATC AGTGACAATA AGAGTGCCAC      120
CGTGGAGCTA GAAAAACTGC AGCCATCCTT TGAGGCCTTG AAGCGCCGTG GAGAGGAGCT      180
TATTGGACGA TCTCAGGGAG CAGACAAGGA TCTGGCTGCA AAAGAAATCC AGGATAAATT      240
GGATCAAATG GTATTCTTCT GGGAGGACAT CAAAGCTCGG GCTGAAGAAC GAGAAATCAA      300
ATTTCTTGAT GTCCTTGAAT TAGCAGAGAA GTTCTGGTAT GACATGGCAG CTCTCCTGAC      360
CACCATCAAA GACACCCAG GACTCGAG                                     388
```

(2) INFORMATION FOR SEQ ID NO:1132:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

```
GAATTCGGCC TTCATGGCCT AAAGTTATAC CAGCTAAAGT GCAGTAGTGT CACTTTTTTC      60
CTGTCAATAT ATAGAGACTT CTAAATCATA ATCATCCTTT TTTAAAAAAA AGAATTTTAA      120
AAAAGATGGA TTTGACACAC TCACCATTTA ATCATTTCCA GCAAAATATA TGTTTGCTG      180
AAATTATGTC AAATGGATGT AATATAGGGT TTGTTTGCTG CTTTGTATGG CTACGTTTGT      240
GAGAGAGCAA TCTTGCTGTG AAACAGTGTG GACTCGAG      278
```

(2) INFORMATION FOR SEQ ID NO:1133:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

```
GAATTCGGCC TTCATGGCCT AATCATTATA ATTTAGTTTG AATTCTTAAA ACCCCGTTAC      60
TAGAACTTAT GTTTAAATTT ATAAATTATA AATAGTTATA AATTATAAAT AAATTGAGAC      120
TGAGGCAGGA AAATCACTTG AACCCAGGAG GCAGAGGTTG CACTGAGCCA AGATCACGCC      180
ACTGCACTCC AGCCTGGGTG ACAGTGAGAC TCCATCTCAA AAAAAAAAAA AAATTATATA      240
TAAATTCTGG TAAGTAAGTT TGAAGAAAAA CCGATTCAAA TAGTATATAT TCAGCTTTAT      300
AAATTCTGTT AAGCATATTT GAATGAGAAT TTATTAAAT GGTATATATT AAGTCTACGG      360
TTCTCGAG      368
```

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 441 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

```
GAATTCGGCC TTCATGGCCT ACGTCTGATT CTCTAAGTTC ATTTCTTGGT GGTGGAGGCT      60
CATTCTTCTT GGAGTCACTG AAATTTTGG GATATCTTTC GAAGCTTGGA TCTTCCCTTC      120
GTGCAGTAGG TCGTGCTTTT TTCCCTCAC TTTGACCAAC AAAGCGATCC CGCCTTTCAA      180
AAGATGAAGA CTGTACTGCT GAACTCTCAG GAAACCTGCC CCTCTCTCGG TGATCAAAGT      240
CATTAAATCT GTTCTGTTGG CGAGAGTAGT CGGATCCATG GCCAAATCGT GCATCTGTAT      300
CTAGAGACAA CTTTTTATTC TCGCTCCAGT AAGGATCATC TCGCCTATGA TCTACATCAC      360
GTGGGCGTTT CAAGGAATTC CTTTTTCTT GTTCATAACG AAGCTGCTGT TGTTGCCTTC      420
TGAGTTCCTC TCTTCTCGA G      441
```

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

```
GCGATTGAAT TCTAGACCTG CCTCGAGCAA GAAACGTTTT CTAAGTCAAA GGAATAAATC    60
CAAAGCCTCT AAGACTGGGT GAGAGAGAGG AAAAGAAATG ACGGAAGCAC TCGAG    115
```

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

```
GAATTCTGGT TTTACTGAAG CTATGTTAGA AACGTCATGT AGAAACTCTT TAGATACTGA    60
GCTTCAGTTT GCTGAAAATA AGCCAGGCAT GTCTTTGTTG CAGGAAAACG TAAGCACAAA    120
GGGTGACGAT ACAGATGTCA TGCTCACAGG TGACACTTTG AGCACCTCAT TGCAGTCTTC    180
CCCAGAAGTG CAGGTACCTC CTACCTCCTT CGAAACAGAA GAAACGCCCC GTCGGGTACC    240
CCCAGATCTC GAG    253
```

(2) INFORMATION FOR SEQ ID NO:1137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

```
GAATTCTGGCT TCATGGACGA GGAGATCGTG TCCGAGAAGC AAGCCGAGGA GAGCCACCGG    60
CAGGACAGCG CCAACCTGCT CATCTTCATC CTGCTGCTCA CCCTCACCAT TCTCACAAATC    120
TGGCTCTTCA AGCACCGCCG GGCCCGCTTC CTGCACGAAA CCGGCCTGGC TATGATTTAT    180
GGTCTTTTGG TGGGCCTTGT GCTTCGGTAT GGCATTATG TTCCGAGTGA TGTAATAAT    240
GTGACCCTGA GCTGTGAAGT GCAGTCAAGT CCAACTACCT TACTGGTAAA TGTTAGTGGA    300
AAATTTTATG AGTATATGCT GAAAGGAGAG ATACTCGAG    339
```

(2) INFORMATION FOR SEQ ID NO:1138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

GAATTCGGCC	TTCATGGCCT	AATTCAGAGG	TGGTGGGACC	TTGGCTATGA	TTCTGTTCAA	60
GCCCCCTAAT	TTTACAGATT	TTATGGAATT	GAGCAACAGA	CAAGATGATT	TTGCCTAGGT	120
TCATAAACAG	GAAAAAAGGA	GAGCCAGGAA	AGAACTCAAT	TGTTGTAAAC	TGCTGTCTTG	180
TCTTGATGTT	CTGTCTTCAT	TCATCATCCA	GCCTTTCCTA	GGAGTGTGAG	AGATAGACCC	240
AGGTAGAAGT	GGGCTGCCCC	TGGGGGGCTT	AGCACAAACAG	AAATTTATTC	TTTTACTGTT	300
CTGGAGGCCA	GACATCTAAA	ATAAAGGTGT	TGATGGGGTC	ATTCTTCCTC	TTGAGGGCTC	360
GAG						363

(2) INFORMATION FOR SEQ ID NO:1139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

GAATTCGGCC	TTCATGGCCT	ACTTGTAGAA	TATTGAGCAA	TTTGTGTGAA	GTGGGGAAGA	60
TGAAAGAAGT	CAGAATTTGA	AACGGAAGAA	TGAAGAAAAG	AAATAAAAAAT	GAAGTTAAGA	120
TAAGAAGTAA	TCTGGAATCA	GAAAGCACTA	CGCTAAGAAT	CCCGTTCTGC	TTCCAGAAGT	180
GGAAGTGCTC	ACGGATCGGG	GAAATCTGCA	AGGCATACCC	CTGCAAGGTC	TCGCTCCAAG	240
GAAGATTCCA	GGCGTTCCAG	ATCAAAGTCC	AGGTCCCGAT	CTGAATCTAG	GTCTAGATCC	300
AGAAGAAGCT	CCCGAAGGCA	TTATACCCGG	TCACGGTCTC	GCTCCCGCTC	CCAAGGACGA	360
TCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:1140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

GAATTCGGCC	TTCATGGCCT	ACACCTCAC	CACCCAAGGG	GTCTCATCT	CTGGCCACCA	60
CTCCACCAGA	TGGGCAGAGC	AGCTATGACC	GCCACCCAGC	CCTCCCGCTC	AGGCCACAGC	120
CGGAGCCTCC	GCATTGCCCC	CACCCCATTT	TTCCAGGGGG	GTTGTAATTT	ATAAGCTGAC	180
GAAGGTAGCC	AGACTTCCGG	AGGACTGACC	ATCTCTCACT	GTCTCCCCCA	CCTTCTTCCT	240
CACTCACACA	TTTTTTGTAC	ATCTGGGCCC	TTAGTTTTTA	TTCTGTTTAT	TATATGTCTC	300
TGTCTCTCTC	TATTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGG	360
TGCAGGAGTG	CCACCCCCAG	GGCTCGAG				389

(2) INFORMATION FOR SEQ ID NO:1141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

GAATTCGGCC	TTCATGGCCT	AGCAGCACTA	ATCTTGATGG	GACAGAAAAT	TTCAAATGAA	60
GAGCTTTCCC	TCTTTTTTTC	TTCTTGGGG	GCATGCCAGC	TTGTGCTTCT	ATGTCAGTAG	120
CCTGTAGTT	GCCATTCCCTG	GCCCAGACAC	TTGCATGCAG	TTTGGTTTGT	CCTCCACCAC	180
TTTGATCATG	TTGCCCATGG	TCTAGACACC	TCCGTGTCCT	TGTATCATG	GCATATAGTC	240
TGTATGCCTC	TGCTGGATT	ATAAGCGGCC	CCATAATAGC	CTTCCTTTCT	GGTTACCCCC	300
TTGATCTCGA	G					311

(2) INFORMATION FOR SEQ ID NO:1142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 530 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

GAATTCGGCC	TTCATGGCCT	AAAAGATCAG	ATTTTGTTCAT	TTAAGACACA	TATTTTACAT	60
TCAAAAATGT	AAAGTCAGGG	TGTGTCTTAA	AATCCATTGG	TGTTTAAATC	ATGCTTAAAC	120
ATGTGACTGC	TGTTGGCCAG	GATACAGTTG	TGGTGGTGTC	GTCAGTATCT	GAGCACATGT	180
GAACCTTGCC	ATGACTATTC	ATATTGTCTT	CTCTTAAACT	GAATTATGTC	CATGGTTGCC	240
AACATGTACT	GTCCATAGTT	GCCACCATGT	ATTTAGGTTG	TCATTAAAAA	TGTCTCAAA	300
AAGATTTTAC	CATGATTCTC	CATCAAAATA	GAAAGCTATT	TTGTATGAAG	AAGAACTCAG	360
ACCAGAAAAG	TCTGATAAAA	ATAATCTCTT	AAATAAGTCT	ACATTAGGTC	TTTCAATTTG	420
TATAAAATGT	AAATTTTGAA	TTATAAGAAA	ACAATTTGTT	ATACTGTAAT	TGGTAGCATT	480
TTTTCTTAGT	AGTGTAACAA	ATAATGTGTA	CCTTACATTC	AAATCTCGAG		530

(2) INFORMATION FOR SEQ ID NO:1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 615 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

GAATTCGGCC	NNCATGGCCN	ACCTATGTNA	NGNATTTCCN	CTCCATTNCC	CCNAGGGTTC	60
TTTCCTGTTC	TTAGAAATGT	TTTGTGATTT	TGCTTCAGAC	ACAGTTTGTC	TACTTCTNGT	120
AAGCATTGTT	CTTAGATNGC	TGGCTTTATA	TCTATCACTC	CCTTGCTCAT	CTGCCCATCC	180
ATCTATCCAT	CCATCCATCC	ATCCATCCAT	CATCCCTCCA	TCCACTTGCT	CATCTGCCCCA	240
TCCATCCATC	CATCTATCCA	TTTATCCAGT	CCATTACCCA	CCCACCATCT	ATTATCCATC	300
CATCCATCCA	TCCATCCATC	CATTCATCCA	CTCACCCATT	CATCCATCAT	CCATCCACTC	360
ANCCATCCAT	TCATTAGTCC	ACCCTTCATC	CATTCACTCA	CCCATCCTTC	CATCCACTCA	420
TCCAATCACC	CATCCATCCA	TACATCCACT	CATCCATTCA	CCATCCATAC	ATCCACTCAT	480
CCATTTCATCC	ATCCATCCAC	CCACCCAGAC	GTCCGTCCAT	CNATCCATCC	ATCCATNCAT	540
CCTTCTATNN	NNTCTGCCAA	CAATCCANAC	ACNTGTCCNT	CNATCCCTTC	CAACCACTCA	600
CCCAGCACAC	TCGAG					615

(2) INFORMATION FOR SEQ ID NO:1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

GAATTCGGCC AAAGAGGCCT AACCGCGGCC GCTACTTCGG CCTCTTTGGC CCTCGAG 57

(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 227 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

GAATTCGGCC TTCATGGCCT AGGTTTTCTT TTATTTAAAA GATCATTCAC AAAATACCAT 60
ATCCATAGAT TACTTTCTG TCATATAGCT GAATGTGTTA AGTGTTTGGA ATTCCATTCT 120
TACATTTAAA GGTCAACTGG ATTGCCAGC AGTTTAGATG CATGTGTTT GTTCTTTATC 180
TTATCCACAT TGAAGATGTA AGTATTGAAT TCTAGACCTG CCTCGAG 227

(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 447 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

CTCGAGTATC TCCTCCTTTC TGATATCCAG TTAGGTGGT CCAATTTTTC CATCTCGGCA 60
TACAGCAAAT TCTTCTGACT TTGCATAGGC AGATTCTTTT TGTCCAACCC TGGCTTTAAC 120
TCTGACCCAA AGAGAATTG ATGGATCACC AACATGATCA GAAATATTAC AATAATGATG 180
AGAAATATTG ATGCAGGCAT CAATCCATTG TGAATTCTTA ACACCATAGT TCTTTACCTC 240
TACGGTAAAA ACAGGGACCT GTGGCATGAT CTGGTACTCC CAATATACGA TAGGGTTTCAT 300
GTTATAGGAT TCAATTGTAA CATTAGTTGG TGTAGGCACT GAGGACGGCC CCAGATCCGC 360
GGTGCCCATC TCAGCCCTGC TCACACCCTG CATGACAAGG GGTAGGAGAA AGAGGAGAGC 420
CATGCTGCTA CCGACGGTCG CTGGCTC 447

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 271 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

```

GGGCGCCATG TTTGCCATCT CAGGTCCAGG TTTCTCCCGG ACTTGAAGA GCTCATTATC      60
GGGTCTGATT TTCAGCTCCT TCTGCAGAGT CTTCCGGAGC TCCAGCATCC GCTGCTGCAT      120
CTGCTTTATG GTCTTATTTT TCTCCAGAAG TTGCTGCTCC AAGTCCTGTT TCTCCTTCTG      180
TAGCTGTGTG AGATCCATGG CCCCAACCTC ACCATTGGT GTTCTTCCTG CAGTTGGAAG      240
CTGGAACACA GGGTCCTGCA TGGCCCTCGA G              271

```

(2) INFORMATION FOR SEQ ID NO:1148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

```

GGATTGGGGA GGGAGTGTGC GAATAGGTGT GGGTGACAGA CATCAAGTAC TTAACAGGGT      60
AATAGAATAT CACAAGGCAA GTGGAGGCAG GCGGAGATCA CAGGACCACA GGACCAAGGC      120
AAAATTAAAA TTGCTAATGA AGTTTGGGC ACCATTGTCA TTGATAACAT CTTATCAGGA      180
GACAGGGTTT GAGAGCAACC GGTCTGACCA AAATTATTA GGCGGGAATT TCCTCCTCCT      240
AATAAGCCTG GGAGCGCTAT GGGAGACTGG AGTTTATTTC ATCTCTGCCT GCCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:1149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

```

GAATTCGGCC TTCATGGCCT ACGGCATTTC AGCGTCAAGT GCACTTAGCG GGGTACCCGG      60
CTCCCCCAGC CCCCACACCC GTCCTGGGTC TCAGGGTGGT TCCAGCTTCT CCTTGGGCAG      120
CCAGAAAGTTG GAGTCCCATC CCCCANNGNA NATTTTTTTT TTTTTTTTTT TGTGATCAGG      180
GAGTGTGTCC AACGTAGCCC CCTGGCCTGT GCAAGCCCTG ACTCCCTCAT GGTGCCTCGG      240
AGAGTGGGGA GCATATTGGG CTGGGGTAAG CACTAGACCC AAGTAGACTG GACACAAAGG      300
GCTCGCCCAG GGCCCTGGCG CCACCCCTCG AG              332

```

(2) INFORMATION FOR SEQ ID NO:1150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

```

GCGAGGCAGG GAAACTCACT TCACGTCTCT TTCCTGTAG AGCATCATGC TTATTTCTGG      60
CTCACTCACA TCTTTGTCTC GGGAGTTCTC TGCCGAGCCA TTGCCCCCTA CAGCAGAGAG      120
CACAGCTGGC TGCCTAGTG CTGAAGGAGC CAGCCCCAGA GCAGGGCATT TCCAGGGGCT      180

```

CTTGTCCCAG AGCGGCAGGC GTTGTGTGCA GAGAACGCCC CTCCCACGCA GCACAGAGAA	240
CGCGGGGTGG GTGTGTGGCT CCGGGCCTGT GGGGCTTAGG CTGCCTGAAC CACCGCCGAC	300
TGGCACCATTG ACTCGGCATT CCTGGAAGTG CCTTACCAAG TTGTTGTTGT TGTTTTGTGTG	360
TTTTTTAAGA GACGGGCTTG CTCTATCATC CAGGCTCGAG	400

(2) INFORMATION FOR SEQ ID NO:1151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC TTCATGGCCT ACCCAGACAA ATACCAAGTT TATTTACAA AACTAGGAA	60
GATGGGTTGA GGTGAGGT GGGGACACA GGTGCGCAGC TGCACAGAGT CAGCAGCAGC	120
AGCCTGCTCC CCGCACTGAG GACTCGGCCT GGANTGCAGT GCCTCCAAAT CAACACGCAG	180
CAAGAGGGGA GTGCAGGGAG GGCCCTGAAC ACCAAGCCTC TGAAAGGCTA AGGGACACAG	240
CTCCAGCTGT CCCAGGAAAA CCAGCAATAA ATAAAAGTGA GGCACGGCCC CACCCACACA	300
TATCATCTAG TCACCCATCT TCACTCTGG	329

(2) INFORMATION FOR SEQ ID NO:1152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC TTCATGGCCT ACCCATAGCC ATGAGCATGA CTGGCTGCCA GCTCTTAGTC	60
ACCAAATGCC ATTCTCCGCT GAAAGAAGCA AGGGCTTTTC AGAGAATAGA CTGAGCACAA	120
AAATGACAAT GGTAATGGAG TAGAACACCT TGACTTTTAA AAGTCCACGA GTCCACAGTG	180
ATGCCTAAGG GAAGTAGGGA GGAAAGCTCT TCTTTACAAC ATCTTCCAGC TAACAGATGG	240
AAAAGGAATG ACAAATGAA AAATCACCAT ATTGCAACTC TCAATAAAGT AACTGATTCA	300
GGCATATCTC GAG	313

(2) INFORMATION FOR SEQ ID NO:1153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GGGCTCCTCG CCAAGGAACT CGTGGCAGAA GAGGGCAGCA GTTGGCAGTA GCTGCCGATG	60
TCTGTCCCCA GCTCCACCAT TCCTCCCTGT GGCTGTGCCG TGCTCGTGGT TTCAGTGTCC	120
GTGTGTCCAT GTGTCTGCC TTCAGGAGCT CGCAGCTGGT GTGCTTGCGG GTCCCAGGCC	180
TGTGTAGTGT CTCTCCCCTG CTGCGGGCGC CCCCACCCCG ATTCCTCTCC CCAGAAGCGG	240

TGGGATGGGC CCCCATGAAC TGCAGCAGCA TGCTGAGGTG TCCATGTTGT CTGCCTTTGT 300
ATAAAGAAAC AGCCTCTACT CGAG 324

(2) INFORMATION FOR SEQ ID NO:1154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GCGAGTTCAG CGGAGAAAAG AAAAAGCAAC GTTTAATTCT AGAAGGCCTC CTGTCCCTGC 60
CTGCTCTGGG TGCTCATGGA ATCAGCTGCT GCCCTGCACT TCTCCCGGCC AGCCTCCCTC 120
CTCCTCCTCC TCCTCAGCCT GTGTGCACTG GTCTCAGCCC AGTTTATTGT CGTGGGGCCC 180
ACTGATCCCA TCTTGCCAC GGTGGAGAA AACACTACGT TACGCTGCCA TCTGTCACCT 240
GAGAAAAATG CTGAGGACAT GGAGGTGCGG TGGTTCCGGT CTCAGTTCTC CCCCAGCATG 300
TTTGTGTATA AAGGTGGCGC ACTCGAG 327

(2) INFORMATION FOR SEQ ID NO:1155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTCGGCC TTCATGGCCT ACGAGCCCTT TGCCTCCAGT AGTCCCACCT TTCTGGACTG 60
AACTGATATT CACCTTACAC AAATGGATTG ATGTCTCATG TCTCCCTAAA ATGTACAAAA 120
CCAAGCTGTG CCCCAACCACC TTGGGCACAT GTCATCAGAC CTTCTGAGGC TGTGTCACGG 180
GTGCACGTCC TCAACCTTGG CAAAATAAAC TTTCTAAGTT ATCTGAGACC TGTCTCAGAT 240
TTTTGGGGTT CACACACCAT ATGTCTGAAT ACTGTCTTTT CCTATCTCTG GCTCCATCCC 300
ACATTGTAAG GGGCCTTGCA CACACAAATG TGGACATTCC AGCCTGCACA CCTAAGCATC 360
GCCTCCACTC CCACCCCTTC AGCGGATGGG TGTGAAAAC TGGCAGTGTG TTCATCTTCA 420
AGATGATGTA TACAGGAAAG TGGTCCAGGC AGATCCTGTG AGCAGGCTTG GGCCCACTTG 480
GGAAGAGTAA CCCAGGATCT CGAG 504

(2) INFORMATION FOR SEQ ID NO:1156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 686 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GNNNNNNNNN NNNNNNNNNN TTCCCCCTTN TNNCATGTTT TGTTCCCTTN TCCTTGTTTN 60
TTTTTTCGGC AAAATATTTC AAGNTATACC CAGGCAACAT NAANTCCAGT TCGGATTTTA 120
ATTAGTCGAG TATGCAGCGT CTTTTCATT TTATTACTCA AAAAAGTTTC ATTTTTTTAT 180

```

TTAGCTTTCT GACTCTGTGC TTGTGCCTTC AACACTTTCA CAACGATTTT CTGCTCCTCG      240
ATAAGGAAAG CACGCTTGAT CCTGTCACGA ACACATTTAG CACACATGGA ACCACCATAG      300
GCCCTGCTGA CATGTTTCTT TGTTTGGAC AATCTCATAA GAACTTTAGG TCTTACAGCA      360
CGAACCCCTC GAAGTCTGCC TGGGCACACA CCACATGCAG ATTTTGGTGC TTTCCCAACC      420
TTCTTGGTAT AAAGGTAAAC AATTCTATTA CCAGGGGTTT GGGACAGCCT AGTTTGTGTTA      480
GAGGCTGTAT TGTAGGAAAG CCTACGTCGG TATGTCAAAC GCTGGACCAT TCTGAGTGCC      540
TGCAGACAAC CAAGGGTGAC TATAATGACA GCGTGCAAGT TGTGGACTGT GGACTAAGTC      600
TGAATGATAC TGCTTTTGAG AAAATGATCA TTTCAGAATT AGTGCACAAC AACTTACGGG      660
GCAGCAGCAA GACTCACAAC CTCGAG                                           686

```

(2) INFORMATION FOR SEQ ID NO:1157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

```

GCAATTTGCT TTTTAAAAA TACATTTTCA TACACTAAGT TTTCTGTTAG CCTAAGTAAT      60
TATATTTCTA ATTAACCTCA AAGTAATTGA TAGGTGGCAA AGGATATCAA TCAAACACAG      120
TCCAAGTAAA AAATGTACAC TAATTTAATA ACAATATTAT TCTATATTAC TTTTTTTTTT      180
TTTTTTTGAC ACAGGAGTTT CACTCTTCTT GCCCAGGCTG GAGTGCAGTG GCACGTCTCG      240
GCTCACTGCA ACCTCCACGC CCCCAGACT CGAG                                           274

```

(2) INFORMATION FOR SEQ ID NO:1158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

```

GAAGATGGAC AACC GGATG TTGCAGGAAA GGCTAACCGG TGGTTTGGGG TTGCTCCCCC      60
TAAATCTGGA AAAATGAACA TGAACATCCT TCACCAGGAA GAGCTCATCG CTCAGAAGAA      120
ACGGGAAATT GAAGCCAAAA TGAACAGAA AGCCAAGCAG AATCAGGTGG CCAGCCCTCA      180
GTCCCCACAT CTCGAG                                           196

```

(2) INFORMATION FOR SEQ ID NO:1159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

```

GAATTCGGCC TTCATGGCCT AGAGGTGAAA TACAGAAAGC CTTTTTTTCT TGATCTTTTC      60
CCGAGATTCA AATCTCCAAT TCCCATTTGG GGGCAAGTTT TTTTCTTCAC CTTCAATATG      120

```

AGAATTCAGC GAACCCTCGA G

141

(2) INFORMATION FOR SEQ ID NO:1160:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GAATTCGGCC	TTCATGGCCT	AGTAATATAT	ATAATTTATA	AGTAAATATA	AATTAGGGAG	60
GTGTAACCAA	CATTTCATA	GAATACATAG	TCAAAAATGG	TTTGCAACCT	CTGCCTAACA	120
AAAATAAAAC	ACCCTACATC	TTTGTTTCAA	GATTGTCACC	CCCAACAGTT	GTGTGAAATG	180
TGGGGCAGGA	ATTATCACTA	TTTTCCTTTG	GAAATTAAGG	TTCCAAAGAT	AATGAGACCA	240
GAGCCAAAGG	TCAGAGTCCA	CTGTCTTCTC	TCTGAGGCCT	CAATGTGAAG	ACCTGAAGCTG	300
TGGCAGCAGA	TAATTCTGGA	GACCTGTATA	TCAGCTGTAT	GCACCACAAC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1161:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

GTATTCATC	ATATAATTTT	CTTCGAATTG	GGAATTTAGG	CAGTATGTTA	TGGGATTTTTT	60
TTTTTAATTT	ATTTTTTTTT	TTTTTAGGAA	GCTTGTTTCT	CTTTGCATT	TATAGAGAGC	120
ATGTTTATAT	TAAAGAGTAC	CTTCCATACT	ATAGAACACA	TTTGTTGGTG	GATTCGGTCC	180
TTTTCTTTCT	ACCCTCCCTG	ATTGCTGCTA	ACAATCCAGA	AAGACAGAAA	TTTTGTTTTT	240
ATTCAGGCAC	ACTCGAG					257

(2) INFORMATION FOR SEQ ID NO:1162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

GAATTCGGCC	TTCATGGCCT	ACTGTTTCCT	TGCCCTTTTC	ACCGTCTGGT	GGTTCCTTGC	60
AGCCCTTGGC	TTGTGGCCCT	CTCATCCATC	TTCCGAGCCT	AGCACTCCAG	TCTCTGCTTC	120
TGTCATCACA	TCGCCTTCTC	TTGAGAAAGA	TCCCAGGCTG	GTATTAAAT	TGCCTGTTGG	180
CAGGAACCTT	GCCTGTCTTC	CCCTACCCCC	ACAGCTCGAG			220

(2) INFORMATION FOR SEQ ID NO:1163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

```

GAATTCGGCC TTCATGGCCT AATCACTTGA GGTCAAGGAGT TCATGACCAG CCTGGCCAAC      60
ATGTTGAAAC CCCATCTCTA CTAAAAATAC AAAAATTAGC TGGGCATGGT GGGGGGCACC      120
TGTAGTCCCA GCTGCTAGGG AGGCTGAGAC AGGAGAATCA CTTGAACCTG AAAGGTGGAG      180
GTTGCAGTGA GCGGAGATCG TGCCACTGCA GTCCAGCCTG GGTGACAGGG CAAGACTCCG      240
TCTCCAAAAA AAAATTAAAA ATAGAAATAC ATTTTAAAAC CCAGATACTT GTAGCATATA      300
TAAGGGACAA TTGCAGTTTG GAAGGTACTT CCACATGTAT TATATAATTT TATTTTITTA      360
AATGAATCTC ATTTGTTTGT CATGAAATTT GGCAAGCTTC TCGAG                      405

```

(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

```

GAATTCGGCC TTCATGGCCT AGCAGAAGCG AGAGGAGGAG GAGAAGAAAG CGGAGTTCGA      60
GCGGCAGCGA AAAATTCGAC AGCAAGAAAT AGAAGAAAAA CTCATCGAGG AAGAAACAGC      120
ACGAAGAGTA GAAGAATTGG TAGCAAAAAG GGTGGAGGAA GAACTGGAGA AAAGGAAGGA      180
TGAAATTGAA CGAGAAGTTC TCCGAAGGGT GGAGGAAGCC AAACGCATCA TGGAAAAGCA      240
GTTGCTCGAA GAACTCGAG                      259

```

(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

```

GAATTCGGCC TTCATGGCCT AAATTCAGC AATACAGCTC TCACATACAT AAATTATAAA      60
ATAATTTTAT TTAAGGTGAT GAAATTTATA AGCAGGTTCA AAAATATAAT AAAA          114

```

(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

```

GAATTCGGCC TTCATGGCCT AGTCAGCAAC ACCCAACACT GTCTGTTTTC CATTTGTTGG      60
TTTTAATCAT AAAATTGTCA AGTGATTCGT GTTTGTACTT TATTTTTTTG TGCCTTCTGA      120
AAGGATCTAA AACAAAAATA TTTTGCCTTT TTTTCCCCAC GTGTATCTGA ACATTAAGCA      180
GATTGGCTCA GACACAATGA AAAGGATAAT CCAATGTACG TGCTGGTGCA CTCTGCTAGT      240
TGTTATCTCT GTAGGGCTCA GGAAGCTGGA AGGAGGAAGG GAGGGTAAGT GGCCTGTGTA      300
GTGGAGGTGG CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

```

GAATTCGGCC TTCATGGCCT AGGTACCAAT AATTTCTTCA CTTCTTCAAC TGCTCTCTTC      60
AATTTGATTT CTGCTCTGTT CTGAGCATCT TCCACAGTGA TTAGTACATG TAAATCTTCA      120
TTTAGATGCT CCCAATTGGG CTTCCTCTTA TTTTGTCTCT CTTTTTTTTT ATCCCTCATT      180
GAGCCTTTGC CTCGGACCAT GATTTTACAT CCGGTTTCTG CTTCAAGTTG TTTGGCTGTA      240
AGTCCTCTAG GTCCAAGGAT TCTCCCAACA AAATTAAACT TCGTCCAGCA GCCGCTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

```

GAATTCGGCC TTCATGGCCT ACCTTCACAG AAAAATGCAT AGCTGGATGC TGCAGACTCT      60
AGCGTTTGCT GTAACATCTC TCGTCTTTTC GTGTGCAGAA ACCATCGATT ATTATGGGGA      120
AATCTGTGAC AATGCATGTC CTTGTGAGGA AAAGGACGGC ATTTTAACTG TGAGCTGTGA      180
AAACCGGGGG ATCATCAGTC TCTCTGAAAT TAGCCCCCCC GATCTCGAG                229

```

(2) INFORMATION FOR SEQ ID NO:1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

```

GAATTCGGCC TTCATGGCCT AGTGCTGGGA GCGCAGCCGG CGGGCGAGGC TGCCTGGAAC      60
GTGGAGCTGC TGGAGCTGTC CGGCTGACCT GGAAAGTTCT TTGGCCTCTA GGCTTTACCT      120

```

```

GGAGGCCTCT TCCTTCAGCT CCTTGTTTTT CCGCACCTCC TCGGCGTGCT TGTCTTCTC 180
TTGCAGCCGT TCCAACATGG CCGCGAGGTG GGCCTCCCTG TTCTCCTTGT TGGATTCCAT 240
CTTCTGGGCC AGTTTTTCCT TAGCCATCTT GATGAAGTTG TTGTTTTCTT CAATGGCCTT 300
TTGGATCACC TCTCTCTCAT GTTCCCGGAA TTCTAGACCT GCCTCGAG 348

```

(2) INFORMATION FOR SEQ ID NO:1170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 81 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

```

GGCTTTTTTC AAATTGCTCT GGCTACCATA TAGAAAATTG ACTGAAGGAG GGCCAAGATG 60
GAAACAGAGA GGACGCTCGA G 81

```

(2) INFORMATION FOR SEQ ID NO:1171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

```

GAATTCTGAG GGAATACTA CGACCATGAG ATTGGCAGTG ATTTGCTTTT GCCTATTTGG 60
CATTGCCTCC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT 120
TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA 180
GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA 240
AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCACATG GACGACGATG ATGACGATGA 300
TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA 360
ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCCTGCT AGTACACAAG CAGTCGAG 418

```

(2) INFORMATION FOR SEQ ID NO:1172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

```

GAAACAGCA CTGCATGTCT TTGGCAAGCC ACAAGTTTCA TAGATACAGC TGTGCTCACT 60
GCAGAAAGCC TTTTCATAAG ATAGAAACAT TGTACCGACA TTGCCAAGAT GAGCATGACA 120
ATGAGATAAA GATTAAATAC TTCTGTGGGC TTTGTGATCT TATCTTTAAT GTGGAAGAAG 180
CATTTTTGGAG TCATTATGAG GAGCACCACA GCATAGATTA TGTATTTGTG TCAGAAAAAA 240
CTGAAACTTC AATTAAAACC GAAGATGATT TTCCAGTAAT AGAGACCACT AACCAGTTAA 300
CTTGTGGTTG CCGTGAGAGT TACATCTGTA AAGTCAACAG AAAAGAAGAT TATAGCAGAT 360
GTCTCCAAAT CATGCTGGAT AAAGGAAAAC TGTGGTTTCG CTGCAGTTTA TGTTCCGGCAA 420

```

CAGCACTCGA G

431

(2) INFORMATION FOR SEQ ID NO:1173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC TTCATGGCCT ACCCCTTAAA GGAAAGAATG GCTGCTCTAG AAGAAAAGAA	60
TGTTTTAATT CAAGAATCAG AAAC TTCAG AAAGAATCTT GAAGAATCTT TACATGATAA	120
GGAAAGATTA GCAGAAGAAA TTGAAAAGCT GAGATCTGAA CTTGACCAAT TGAAAATGAG	180
AAGTGGCTCT TTAAT GAAC CCACAATACC AAGAATCAT CTAGACACCT CAGCTGAGTT	240
GCGGTACTCA GTGGGATCCC TAGTGGACAG CCAGTCTGAT TACAGAACAA CTAAAGTAAT	300
AAGAAAACCA AAATCGAG	319

(2) INFORMATION FOR SEQ ID NO:1174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 171 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAATTCGGCC TTCATGGCCT ACTTAATATA TTTGTGAGAT AATTATTGAG ACATTTTATT	60
AATATTTTAT TTAGTCTTAG AATTCAGAG AAAAGTGAAC CTAGAGAGGT ACTTCTCCTG	120
GTTCAAACCTG TGAACATGAA AATTCTGAAT TTAAGTAACT GGATCCTCGA G	171

(2) INFORMATION FOR SEQ ID NO:1175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAATTCGGCC TTCATGGCCT AAGGAAACAA AAAGCTAAGG GCAAAATGTA CAACTTAGA	60
AGAATTGGAA GATAGAAACA AGATAGAAAA TGAAAATATT GTCAAGAGTT TCAGATAGAA	120
AATGAAAAAC AAGCTAAGAC AAGTATTGGA GAAGTATAGA AGATAGAAAA ATATAAGCC	180
AAAAATTGGA TAAAATAGCA CTGAAAAAAT GAGGAAATTA TTGGTAACCA ATTTATTTTA	240
AAAGCCCATC AATTTAATTT CTGGTGGTGC AGAAGTTAGA AGGTAAAGCT TGAGAAGATG	300
AGGGTGTTTA CGTAGACCAG AACCAATTTA GAAGAATACT TGAAGCTAGA AGGGGAAGGA	360
CTCGAG	366

(2) INFORMATION FOR SEQ ID NO:1176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 222 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

```

GAATTCGGCC TTCAGGCCTA CAAGAATTTT ATGCCATCCA AGAGTATTAG CACAAATAAA      60
TAAAGGCAAT TTGTAAATTT TTTCCCTGAA AATCTAAAAA ACAAGAAAAC TATCTCTTCA      120
GGGTGATTAT AATTAGGTCT ATGAGACTCT CAAGGTCCTT TTAGTGATTC AGAATCTATA      180
GTTGAAATA CTTATTTTAA AATGTTCAGG CAGTTGCTCG AG                222

```

(2) INFORMATION FOR SEQ ID NO:1177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```

GAATTGTCCA CAGCCTGTCA TGCCGCACAA CTGTCCACGC TCGGTTCTCT CGGATATCAC      60
AGTACACTAC AAATGGCTTC AGGGGGCCAC TGCCATCAGG ATCAATGGTG AAGTTTCCAG      120
AAGTTTTCCC ACTGAGCCGA TAAGCCTCAC AGGATTCCTT ATACAAAGGT GTGTGGCAGG      180
TCTCTCCCTT GTAGCCCGTC AGTTCGCAGT AGCAAATGAA GTCATCCCAA GACTGGTAGC      240
AGCGTCCATC ATGCTCACAC ATGTTAGGGC TGCACCTATC AGTGATGCCA CATGTATCAA      300
AGAGGACCTC AGCATAGAAT CCAAGCCGCC GGCCCTCCAC CAGAGTCAGG TTGACCAGTT      360
GACCGAG                                           367

```

(2) INFORMATION FOR SEQ ID NO:1178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```

GAATTTAGAA CGGGTACAAA AGGACCTAAG CCAAACACAG TGTCAAATGA AGGAAATGGA      60
ACAAAAGTAT CAAAATGAAC AAGTTAAAGT GAATAAATAC ATTGGAAAGC AGGAGTCTGT      120
AGAGGAGAGA TTGTCTCAAC TACAAAGTGA GAATATGTTG CTTGACAAC AACTGGATGA      180
TGCCCAAC AAGGCTGACA ATAAAGAGAA GACAGTGATT AATATCCAAG ACCAGTTTCA      240
TGCTATTGTG CAAAACTTC AAGCTGAGAG TGAAAAGCAA AGTCTTCTGC TAGAAGAAAG      300
AAATAAGGAG TTAATCAGTG AATGTAATCA CTAAAAGAA AGACAGTATC AATATGAAAA      360
TCTCGAG                                           367

```

(2) INFORMATION FOR SEQ ID NO:1179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

GAAACCGAAA GTGGAAATGT ACTCTGGGAG TGATGATGAT GATGATTTTA ACAAACCTTC	60
TAAAAAAGCT AAAGGGAAAG CTCAAAAATC AAATAAGAAG TGGGATGGGT CAGAGGAGGA	120
TGAGGATAAC AGTAAAAAAA TTAAAGAGCG TTCAAGAATA AATTCTTCTG GTGAAAGTGG	180
TGATGAATCA GATGAATTTT TGCAATCTAG AAAAGGACAG AAAAAAATC AGAAAAACAA	240
GCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 149 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

GAATTCGGCC TTCATGGCCT ACGAGTTCTT CATGCTTGTT GTTGAGATTT GAGATGTTTA	60
TTGGTAACAT TGCTTTTTT CCATCCTTTT TTTCTTTCC TAACCTGGTT TCTTCCAGT	120
CAACTGCAGA TAGAAGACCT GACCTCGAG	149

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

GAATTCGGCC TTCATGGCCT AGAAAATTAA ACTGTTTTTT AAACCAGGTG TTCACCTTTC	60
ATTGATTTTT GCATAGTACT TGGTGAACCC TATTGATTTT TAGATTCAGG TAATTTTTCA	120
GTGTGAAAGA GTTTTTCTGT TATATCTTCA CTGTGATATC CATTCCATTC CCTTCTCAGT	180
TAATACTCAG TTTAGCTCTA GTATCTGTCT CTCAAATTAT GTTTAATTGC TTTTATCACT	240
TTGTCTCTCA G	251

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

```

GAATTCTAGA CCTGCCTAGA GTGCTCTGTG TATGCGGATG ATTTAGAATT GTCATTTCTC      60
TTTACTGGAT GTTTATTTAT AAAGATCTGG CCTGTTCTTG CGTCTGCGGA GCGGCCCTTG      120
TCTCCAGCT ATCTATAACC TTAGCTAGAG TGTCGCCTTG TGGGTTCCCT CTCGAG          176

```

(2) INFORMATION FOR SEQ ID NO:1183:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 410 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

```

GAATTTAGAA TTCTTGACGG GTTCTCGGGG GTTCCTGTTG TATAAAGGCC TTCATTACTT      60
TAGTTATACC CAAGTGAAAG GGGCATTAC CTCGTGACAA GTGGATTATA GGAGAAAAAG      120
AGGAGATGGT AGGTCAGAGT GTGCTTAGAA GTCATGCCCA GTGTTCTCAT CAATGCCAGA      180
CATTACGGGC TGCCCTTCCA TCAGCCATTC TACCTTTCTT CCTGCTAACA ATATCCCAAT      240
TTTGTTCAAG TATCAGGCCA CTTAATATGT TTCAGGGAAA ACTGGTTCCA GCCCAGAGCA      300
GTGTGGACCT TGATTACATC AACTAATCA TGGTGAGTCC ATTTTCCTT CCAGAAATTC      360
GTTTAGGAGT GGACATGTAT TTCACTTGTG AGTACACAAG ACGACTCGAG          410

```

(2) INFORMATION FOR SEQ ID NO:1184:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 286 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

```

GGAAACAGAC AGTACCAAGG AAGAAGCAGC TAAGATGGAA AAGGAATATG GAAGCTTGAA      60
GGATTCCACA AAAGATGATA ACTCCAACCC AGGAGGAAAG ACAGATGAAC CCAAAGGAAA      120
AACAGAAGCC TATTTGGAAG CCATCAGAAA AAATATTGAA TGGTTGAAGA AACATGACAA      180
AAAGGGAAAT AAAGAAGATT ATGACCTTTC AAAGATGAGA GACTTCATCA ATAAACAAGC      240
TGATGCTTAT GTGGAGAAAG GCATCCTTGA CAAGGAAGGG CTCGAG          286

```

(2) INFORMATION FOR SEQ ID NO:1185:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 417 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

```

GCGATTGAAT TCTAGACCTG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACCGCCTCTG      60
CCCCTACAAG ACACAGATCT CTCGTCAGCC CCAAAGCCTG TGGCTGCAGC CACGATTGTG      120
TCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACCGCCTCTG      180
CCCCTACAAG ACACAGATCT CTCGTCAGCC CCAAAGCCTG TGGCTGCAGC CACGCCTGTG      240

```

```

TCCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACCGCCTCTG      300
CCCCTACAAG ACACAGATCT CTCGTCAGCC CCAAAGCCTG TGGCTGCAGC CACGCTTGTTG      360
TCCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACTCGAG          417

```

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

```

GGAAGGGGCT TTTACAACTT CCTTTTGTTC CCAGGCGTTA GTATCTCTGC TTGGTATAAG      60
ATACCAGTAT TCCTAGGAAA GGCCTTGAAA AGAGGGACAG ATACAAGCCT CTTCTGAAAA      120
ATCTATGCTT TTCTTACCTC TACCAAGTAA TAGCAAACAT GAAAATGGTA AAGATCTTTA      180
CAACATTTGT CTCTGTACAT ATAAAACGTT TAAACACATG CGCAAAGATG GAGCAAATA      240
TCATAGAAAA TAATCTCGAG          260

```

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

```

GAATTCGGCC TTCATGGCCT ACAAGGAAAT GCCCAAGGAA AAACGTGAGC TTCAGTTTCG      60
GCGAAAGGTC TTAGCAGTCA CAGACTCACC TGCCAGGAAG GGCAAGGACT CTCCTCTAA      120
GCAGAGCCCT GGGGAGTCCA CGAAGAAGCA GGATGGCCTA GTCCAGATTG CACCAAACCT      180
GACTGTGATC CAGTTCATTA AAGTCTTCCC CAGGGTGCTG CTGCAGACCC TACGCCACCC      240
CATCTTCCTG CTGGTGGTCC TGTCCAGGT ATGCTTGTC TCCATGGCTG CGGGCATGGC      300
CACCTTCCTG CCAAGTTCC TGGAGCGCCA GCTCGAG          337

```

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 537 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

```

GAATTGGCCT TCATGGCCTA CGAGGCGTCA CTGATCTTAA CGAGACTTCC AAATCGTCTC      60
AGCAGGGGCT CCAGACTTCC CCAGCAGGCG CGAGGTTTCC TGTCATGCTT TCGCCTTCCT      120
TCTCATATAC ACCAGTGCTA GAGTTCATCA TGTGTCAAAA TTGTATCTTG CTTCTTGTTT      180
TCAAGATGAT CTAATAGTTG TCTTATCTCA GCATCATACT CCACCCATTC TGGGACAATT      240
CTGGCAGCAG CTTTTAGTTT GGATTCTTTT GTTTTGGGAT TATTGCACAG ATCAATTGTT      300
TTGGCCCTCC TTGGACTAAC CACATACAAA TATGAATCTG GCTGCAAGAA CAGGATATCC      360

```


AGGTAAGTAG AGAGTGGGCA TTGATAAAAA TATCTGGTGG AGAAGCCTAG GATTCAACT	420
TTTTGTGAGA GGATTCCTGT TGGGACAGCT TTACCAGAAA AGAATAATAG CGGATATGTT	480
CATCCAAACT AAGAACTTTC ATGCATCTTG CATTGTTACA TAGCCTGTGG ACTCGAG	537

(2) INFORMATION FOR SEQ ID NO:1189:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 65 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

GAATTCGGCC TTCGTGGCCT AATTGAATTC TAGACCTGCC TCGAGGATTC AATTAGGCCA	60
TCGAG	65

(2) INFORMATION FOR SEQ ID NO:1190:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 398 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

GAATTCGGCT TCATGGCCTA ACTTTATGTC ATAAACTGA TTAAATAAT CTTGAAATGG	60
CCATTAAGGA AGATCAGATT GCAGATAACT TTCAAGGAAT ATCAGGTCCT AAAGAAGACA	120
GCACAAGTAT AAAAGGTAAT TCAGACCAGG ATTCTTTTCT TCATGAGAAT TCGTTACACC	180
AAGAAGAGAG TCAAAAAGAA AATATGCCTT GTGGGGAAAC AGCAGAATTT AAACAAAAGC	240
AAAGTGTTAA CAAAGGAAAA CAAGGAAAGG AGCAAAATCA GGAATCAGAG ACAGAGGCAG	300
AAGAGCTACG CAACTTTTGG AAAACCCATA CTATGCAACA AACTAAACAG CAAAGGGAAA	360
ATATTCAACA AGTGTCAACA AAAGAAGCTA AACTCGAG	398

(2) INFORMATION FOR SEQ ID NO:1191:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

GAATTCGGCC TTCATGGCCT AGCCATTGTT TATACATTAT TGCTGTCAGT ATTCACCAAG	60
ATGGTGCTAT TACCTGTTGT GGGGCAATTT TCCTTGTCAT TTCTACATAT CTTGGAACAG	120
CTTTTGTCCT TATATTTTCA AGAATGTTCT AAAGCAGACA GCCTTGGAGG AGAGACAGAT	180
AGTGACTCCC TCCAGGGAAA AAGTCGGATT TGTGTGCTCC CCTGCCTCGA G	231

(2) INFORMATION FOR SEQ ID NO:1192:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

```
GAATTCGGCC TTCATGGCCT AACTAACCG CAGCATGGCG GATCTGAAGC ACAGCAGCTT      60
GCGGTACGAG CTCCGAGCAG ATCTGGAGGA AGAAAGAATG CGGCAGAAAA TAGCAGAAAG      120
GACCTCAGAA GAAACAATAC GCATTTACTC TTTGAGACTG TTTTGAACCT GTATTGTTCT      180
GGCTGTTTTA GGGGCATGCT TTTATGCAAT ATACGTAGCA ACTGTCTTCT CGCAAGAGCA      240
CATGAAAAAG GAAATCCTCG AG                                     262
```

(2) INFORMATION FOR SEQ ID NO:1193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

```
GAATTCGGCC TTCATGGCCT AGAGGAAATT GCTAATGTAA CAGAGACATC AGATCCAGAA      60
TTCCAACGAA CCTGAATGAG CCCTGGTGTG GAACAGCCGT GAGCCTGTCC ACGTTTTTCT      120
CCTGATCTCT GCTTTTCATT AGTAATGAAT TTCCACTCCT TCTCCCCTTT CATGACAAAT      180
CAGTACAGTG AATGTAATTG CCACATCCAG CGATGCATCA TCTTCCCCT TTTCTAGGCT      240
GCAGAGAAGG AAGCAGCCCT TGTGCAGCAA GAAGAAGAAA AGGCTGAACA ACGGAAAAGA      300
GCTCGGGCTG AGAAGAAAGC GTTAAAAAAG AAGAAAAAGA TCAGAGGCCC AGAGAAGCGC      360
GGAGCAGATG ATGGACTCGA G                                     381
```

(2) INFORMATION FOR SEQ ID NO:1194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

```
GCGATTGAAT TCTAGACCTG CCTCTCTTAC CCTTGGCTTA CTAATATATT CTTAGTGGCA      60
TTTCATTGGG TGGTACTGGT GCGCATTCA AACAGGACAC TTGTATCTGA GTGAGCAGCT      120
GGAGCAGTAA GAATGACAAC ACTTGGTCTC TGCAGATTGG CTGGACCCAC CACTCTGGTG      180
CTAGTGCTGG CTTGGTGGCT GAGGGAACAA GCAGGAAGTA GAAGAGGAAA TGAGATGTGG      240
TGAGAGTGGG AAGAGAGGAC AGATTGGGGA GGGGAGGGAA AGTGCAAACG CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:1195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

```
GCGATTGAAG TCATTGCCAC GCCTACTAGT TTGCACTAAA GGAAAGTCAG TTTGGTATGA      60
ATTACAATGG CCAACGTTAC ATTCTCCTCC GTTTGTGTTT TTTTNTTTTAA TCTCAATTTT      120
TCTTACTTTT CTTATTCCCC CTATGCTGAT GCCAATCAGT TTCTTTTGGG AAAGTTTNTAA      180
CAGATCGGTT TTATGTTTTG AAGTACAGCA AGTATTTTCAT CCTCTCTTTA AAATACAAAA      240
CCCAGAAACC CAGGAGCTCG AG                                         262
```

(2) INFORMATION FOR SEQ ID NO:1196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

```
GAATTCGGCT TCATGGCCTA GACCGTCTCA AAGAAAACAC ATATACCTTT TGCTCAGATT      60
ATTGTTAAAT TTTACCTCAT TTACTTTATC AATTGCTCTT TCTCTATTTA TGTGTATCAG      120
ATTATTGTTA AATGTTACCT TATTGTCCTT ATCAATTGCT CTCTTTATGT ATGTTTGTGT      180
GTACTGTTGC ACATGCAAAT GCACACAAAT ATATGTTTCT GAATTTTNTG AGAGTAGATT      240
GCATACATTA TGGGACCTGC CTCGAG                                         262
```

(2) INFORMATION FOR SEQ ID NO:1197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

```
GAATTCGGCC TTCATGGCCT AAGAAACACT TTTAAAAATC TTTCACTAGT TATTTTGTAC      60
ATAGATAAGA TAGTTGATTC CCAGCTTTTA TCTGTAAAGT TGTCAATAAT GGAATTAACCT      120
TCGGTGATTC TGTTGTATAA AACATTGTTA TATTTTNTAGG TGTGTGCGGA TTTTAGGCAA      180
ACAAGAAAAT ATTAGAGTGA TGCAATTGGC TTTGTTCCAG GGGATGCTCG AG              232
```

(2) INFORMATION FOR SEQ ID NO:1198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

```

GACCTTTACC ACTAAGTGGA GCCAACTTTA GCACCTTGCT AATGAATCTG GGTCCCTGAGA      60
ATTGTGCAAC ACTGCTGCTC TTTGTTTAC TTGAGAGTAA AATTCTGCTG CATTCTCTTA      120
GGCCAGCTGT CTTGACTGGG GTAGCTGAAG CTGTTGTAGC TATGATCTTT CCATTTCAGT      180
GGCAATGCCC ATATATTCCC CTTTGTCTC TTTCACTGGC TGCAGTGTCT AGTGCACCTT      240
TACCATTAT AGTTGGAGTT GACTCAAGGT ATTTTGATCT TCATGACCCA CCAAGGCTCG      300
AG                                                                                   302

```

(2) INFORMATION FOR SEQ ID NO:1199:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

```

GCCACTGCTC CTGGCCAGGA CTCTCTTATT AGGTTTGACA TTTCAAGAGT TTAGAAATTA      60
CCTTCCAGAA TTCACAGGTA AAAGCCAGAC CTCTCCTTGG TGAAGATACA ATTCTTTACA      120
ATTTTACAAT AGTTAAGTAT ATTTTATCAG TCTATATTGG CTGTTTAGTT GACAAACCGT      180
TAAAAATTGG TGACAGTCCA GATGTGGTCA CTCATGCCTC TAATCCTCGA G                231

```

(2) INFORMATION FOR SEQ ID NO:1200:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 235 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

```

GAATTCTAGG CCTGACCCAG CCCCCATGGC TTCAGAAGAG CTACAGAAAG ATCTAGAAGA      60
GGTAAAGGTG TTGCTGGAAA AGGCTACTAG GAAAAGAGTA CGTGATGCCC TTACAGCTGA      120
AAAATCCAAG ATTGAGACAG AAATCAAGAA CAAGATGCAA CAGAAATCAC AGAAGAAAGC      180
AGAACTTCTT GATAATGAAA AACCAGCTGC TGTGGTTGCT CCCATCACTC TCGAG          235

```

(2) INFORMATION FOR SEQ ID NO:1201:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 119 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

```

GAATGAGAGG TCAGAGTATT CCATTGCACA CGCACCTGG GGCTGACAGA CTTGTGCCCC      60
CTAGCCTTCA TGCA TGCCCA AGCACTGGCA GCTTTGCAGC CCCTGCCCCA CGACTCGAG      119

```

(2) INFORMATION FOR SEQ ID NO:1202:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

```
GATTGAATTC TAGACCTGCC TCGAGATTCT TTGAGCACTT TCCCCCATCC CCAGGGCCAC      60
AGATCCCCTT CCTTACTTGT TGGGGGGAGG TCTGGAGCAC CTCGCCAATG CCCTTCCCCC      120
ATCCGGCTGG GTCCTTCCAG TTATTATTTT GTGTATTTAT TTATTATCTT ATTTATTATT      180
CTATTTAATC TCTTGGCCTC ACCCAGGGAC CGTCTGGCTT CCCCAGCTGG ACTGGGAGGT      240
CAGGAAGCCA GGCAAGGAGA GGGACAGCAC AGGCCACAGA GGGCTGCCCC CACCACACAC      300
ACCCCCGCGT CTCGGGAGAA ACCCACCTCT TTCAGAGCCT GCACTCGCTA AGGAAGGGGA      360
CTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

```
GGTGAGATGG AAAAGGAGTT TCCTGAGCTT ATCCGAAGTG TTGGTTTACT TACGGTAGCT      60
GCTGACTCTA TCTCTACCAA TGGCAGTGAA GCAGTTACTG AGGAGGTATC TCAAGTATCT      120
CTCTCAGTAG ACGACAAAGG TGGATGTGAG GAAGACAATG CTTCTGCAGT CGAAGAGCAA      180
CCAGGCTTAA CACTGGGGGT GTCATCATCT TCAGGAGAAG CTCTGACAAA TGCTGTTCAA      240
CCCTCCTCTG AGACTGTGCA GCAAGAATCC AGTTCCTCCT CCCATCATGA TGCAAAGAAT      300
CAGCAGCCTG TTCCTTGTGA AAATGCAACC CCCAAACTCG AG                          342
```

(2) INFORMATION FOR SEQ ID NO:1204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 645 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

```
GAATTCGGCT TCATGGCCTA CGTCTTTCTA ACTATCTATG GGGTGGAGCT GTTCCTGAAG      60
GTTGCCGGCC TGGGCCCTGT GGAGTACTTG TCTTCCGGAT GGAACCTGTT TGAATCTCTC      120
GTGACAGTGT TCGCCTTCCT GGGACTGCTG GCGCTGGCCC TCAACATGGA GCCCTTCTAT      180
TTCATCGTGG TCCTGCGCCC CCTCCAGCTG CTGAGGTTGT TTAAGTTGAA GGAGCGCTAC      240
CGCAACGTGC TGGACACCAT GTTCGAGCTG CTGCCCCGGA TGGCCAGCCT GGGCCTCACC      300
CTGCTCATCT TTACTACTC CTTGCGCATC GTGGGCATGG AGTTCTTCTG CGGGATCGTC      360
TTCCCCAACT GCTGCAACAC GAGTACAGTG GCAGATGCCT ACCGCTGGCG CAACCACACC      420
GTGGGCAACA GGACCGTGGT GGAGGAAGGC TACTATTATC TCAATAATTT TGACAACATC      480
CTCAACAGCT TTGTGACCCT GTTTGAGCTC ACAGTTGTCA ACAACTGGTA CATCATCATG      540
GAAGGCGTCA CCTCTCAGAC CTCCCACTGG AGCCGCCTCT ACTTCATGAC CTTTTACATT      600
GTGACCATGG TGGTGATGAC GATCATTGTC GCCTTTATCC TCGAG                          645
```

(2) INFORMATION FOR SEQ ID NO:1205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

```

GAATTCGGCC TTCATGGCCT ACAGTACACA AGTGCTAGCC CTAGCAGCTC GCGATGTGCT      60
TCAGCAGAGC AGACGCTGCG GATAACTACC CTTTGGAAAC ATGTCAACAG AGGAAACTTT      120
TTCTCACTT CCATCCCCCG AATTTGATTG GGAACAAGTT TGTCCTCTT AGGGGATCAC      180
CCCACAGAGG GCCTGGGTGT TATTTTTCAG ATGGATATGG CTTGGCATACT GACTTATCTA      240
AGATCCCAAC CAGTATAAAA GGATATACTT TGGGAGCCAG AACAGCTGTG AGGTTTAAGC      300
CAATACAGAA GGAAATGACA CCTCATGCAG GCAGGT      336

```

(2) INFORMATION FOR SEQ ID NO:1206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

```

GGAAAATCTG AACAAACAAC CGAATAAGCA GTGGAAGAAA TCACAAACAT CTACAAATCC      60
AAAAGCTGCT CTCAAGTCTA AGATAGTTGC TGAATTTCGA TCTCAGGCC TAATTGAAGA      120
GCTGTTGCTA TACAAGCGCT CAGAAGATCA GATAGAACTG AAGGAAAAGC AGTTGTCAAC      180
TATGAGGGTG GATGTGTGCA GCACAGAAAC TCTCAAATGC TTAAGAGATA AAACAGGTGG      240
GAAGAAGTTC TCCAAAGAAT TTGAAGAGGC AAGCTCCAAG CTGGAAGAAT TTGTGAATGG      300
ATCACTCGA      309

```

(2) INFORMATION FOR SEQ ID NO:1207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```

GAATTCGGCC TTCATGGCCT ACAGCTTTTG AGCGGAAACC TGAAAGAAGG TTTGCAGTAT      60
CTTCAGAGTC TGAATTTTGA GCGGATAGTG ATGAGCCAGC TAAATCCCCT GAAGATTTGC      120
CTGCCCTCAG TGGTTAACTT TTTTGCTGCA ATCACAAATA AGTACCAGCT CGTCTTCTGC      180
TACACCATCA TTGAGAGGAA CAATCGCCAG ATGCTGCCAG TCATTAGGAG TACCGCTGGA      240
GGAGACTCAG TGCAGATCTG CACAAACCCG CTGGACACCT TCTTCCCCTT TGATCCCTGT      300
GTGCTGAAGA GGTAGGTACT TTAAACGTT GACATCTCGA G      341

```

(2) INFORMATION FOR SEQ ID NO:1208:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 588 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

```
GAATTCGGCC TTCATGGCCT ANCGAGCGGC AGGTGTGCAC AGAGGTNCTC CACTTTGTNT      60
TCTGAACTCG CGGTCAGGAT GGTTTTCTCT GTCAGGCAGT GTGGCCATGT TGGCAGAACT      120
GAAGAAGTTT TACTGACGTT CAAGATATTC CTTGTTCATCA TTTGTCTTCA TGTCTNCTG      180
GTAACATCCC TGGAAGAAGA TACTGATAAT TCCAGTTTGT CACCACCACC TGCTAAATTA      240
TCTGTTGTCA GTTTTGCCCC CTCCTCCAAT GGTACTCCAG AGGTTGAAAC AACAGCCTC      300
AATGATGTTA CTTTAAGCTT ACTCCCTTCA AACGAAACAG AAAAACTAA AATCACTATA      360
GTAAAAACCT TCAATGCATC AGGCGTCAAA CCCCAGAGAA ATATCTGCAA TTTGTCATCT      420
ATTTGCAATG ACTCAGCATT TTTTAGAGGT GAGATCATGT TTCAATATGA TAAAGAAAGC      480
ACTGTTCCCC AGAATCAACA TATAACGAAT GGCACCTTAA CTGGAGTCCT GTCTCTAAGT      540
GAATTAAAC GCTCAGAGCT CAACAAAACC CTGCAAAACC TACTCGAG      588
```

(2) INFORMATION FOR SEQ ID NO:1209:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 418 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

```
GAATTCGGCC TTCATGGCCT ACAAGGATAG AATTCATTCC ACCTATATGT ACTTAGCAGG      60
GAGTATTGGT TTAACAGCTT TGTCTGCCAT AGCAATCAGC AGAACGCCTG TTCTCATGAA      120
CTTCATGATG AGAGGCTCTT GGGTGACAAT TGGTGTGACC TTTGCAGCCA TGGTTGGAGC      180
TGGAATGCTG GTACGATCAA TACCATATGA CCAGAGCCCA GGCCCAAAGC ATCTTGCTTG      240
GTTGCTACAT TCTGGTGTGA TGGGTGCAGT GGTGGCTCCT CTGACAATAT TAGGGGGTCC      300
TCTTCTCATC AGAGCTGCAT GGTACACAGC TGGCATTGTG GGAGGCCTCT CCACTGTGGC      360
CATGTGTGCG CCCAGTGAAA AGTTTCTGAA CATGGGTGCA CCCCAGGGAG TGCTCGAG      418
```

(2) INFORMATION FOR SEQ ID NO:1210:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

```
GAATTCGGCC TTCATGGCCT AGGTTGCAAC TGCCACGCAG CAACTGCCAC GCAGAAAAAG      60
GAGGGGTTGA AAAGGGAGTA GCTTCTGATA TTCAGAAGCT ATTGGAAGAG ATGCTCAAAG      120
AAGAAAAAAT TACCATAATC CAATAAAGAA GAAGACCTGA GATCCAGGAA GCAGATGATC      180
TGAAGTGCAG AGAAAGTTCA GGAAAGTTCC CTCATTCTATG ATGATGGGAA ATAACAGTAA      240
ATTCTGTACA GCAGTCTTGG ACAACAACCA ATCTAAACTG GCACAGTGCA GAGGCAATCA      300
ACAGAGAACA TAATATTGAT AGAATGCCTG ACGCTTTTGA TTGTATTAC AGGAAACATA      360
```

AACAAATTGGA AAACCTCGAG

379

(2) INFORMATION FOR SEQ ID NO:1211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

```

GAATTCGGCC TTCATGGCCT AGAAACAGGG TATTATTTAT CCTCTTAGCA TATGTTTTGT      60
AATGATTCTG TTACATCAGA GCTTCTGTTG ATGAGTGCCA CTAAAGTGAG ATTGTTGATG      120
AGGATTGGCC TTATTTTTTT GTGGTTCTAT TCAATACTTG CCACAGCATT TATTTTCTAA      180
AACATTTCTA CGGTCTATAC TTATCAGTGT CTGATCACAT GCAGGCACTG GTCAAGGTGG      240
AGCATGGTCG AGGCGTTCTT ACTGATACAA ACTCGTGCCT TCTCTTGGAC ACAAGGAGCC      300
CATGTTCTGG TTAACCTCTG GTTCATTAT TTTACTTGTC ATGCATCGCC TCTATCTTCT      360
CCCTTTATTG CGTCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

```

GAATTCGGCC TTCATGGCCT AGTGAAGGGT ATTGGTGGTG TTTTTTCCCC TTTACCTCTC      60
ATTGGGGCAT TTAAAATAG GAGGCCAACT TCATTTACTC CTGTTTAGTA AATCTAAATG      120
AGTGTAGGTT TTAAATTAGA TTTTTTCCCA AAACCCTTCA GAAGGTCTAG TATTAGGGCA      180
GTTGATAAGT AAGTGGAAGC ACCTTGGGCA GGACCCAGTG ACCTGTCCTT TTACTTATTA      240
CAGCACCTGC ACGGGAAGCA GATCTGGAGG ATGAAATTTA ACCTGTTACA GTGTGTGTAT      300
GTTTTAGGGT GTGTGTTTTT CGAATACTGT GGGGAGTTCC CTTTTTCCTT CTCCCATGAT      360
GGATTCTTTT GTCTTTCTAG AGATACCATA GGAGGATATC TGGATTTTTC ACCTAAGGCA      420
GTGTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

```

CTCGAGTCTC TCCTGTTAAT CTCCTATTTA TAAAAGGATC ATGAGGCTGC CAAGTGCTAA      60
AAATGGAGAT GGTCTAGTAA CTAGAAACT CCCCAACCCA GGGAGCACAC CTACGTATGT      120
CCCTACAACC TAATAATGTG ATGTGTTTTG GAACACAGAC ATTAGAAGTT CATGAAGTTT      180
TAACGTGTTA TTCTTTCCCA AGCATCATCA AGTTATGATT TAGGCAATGT ATGATTGAAA      240

```


TGCATTTCATT	CATCACGCAT	AGGCACAATC	ACAGAAATAT	TGCACAAAAT	ATGTCCCTGA	300
CTGAAACTGA	GAGGTACAAA	AACGTATTTT	ACTCTTCGTA	AAGAAGTTTG	TGAGGAAATA	360
CAACTCTGCG	ATCGTATAGA	CATGTTTCCT	GATAATACAC	TGACATTAC	AAACAGTAGG	420
CCATGAAGGC	CGAATTC					437

(2) INFORMATION FOR SEQ ID NO:1214:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 295 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

GAATTCGGCC	TTCATGGCCT	AAAAAGAAAT	GATGTTTTCT	CTCCAACAGT	GTGTTTTTAT	60
TTCTTTCATC	TACCTGTCCA	GTAATCATTT	TAAAAAAGAA	AATAGCATT	GTTACTGCCT	120
GTGTGATGTG	GCCCCGGCTT	ATCTGCACTC	TCCCTCCTGT	TTACTGTTCC	AGCCACCTCA	180
GCTTTTCTC	TGTTCTCTA	GCATGGCAAG	CTTATTCCTG	CCTCATGACT	CTTTCGCATG	240
GTGTTTTCAG	ATTTCTCTG	TAGCACTCTG	CACGCATTGT	CCACCTAAAC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:1215:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 265 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

GACCTGCCGC	GAGTGTGTT	GATAGCTTGC	TCAAGATCAC	ACAGCTAGTA	GGTAGTGAGG	60
CTAGGATTTA	GACTTAAGTA	GTTGGTTGTA	GAGTCCACGT	GTTTAACCAT	TACACTACTT	120
TGATAACAAT	ATCATTATTA	TTATTATCTT	TTTTTTTTTT	TTGATACAAA	GTCTCACTTT	180
GTTGCCCAGG	CTGGAGTGCA	GTGGCATAAT	CATGGCTCAC	TGCAGCCTCG	AATCCTGCGG	240
CTCAAGGGAT	CCCCCCTC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:1216:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

GAATTCGGCC	TTCATGGCCT	AAAAGAAGGA	GCGCGAGAGA	AAAAAGCGAG	ATGAAGAAAA	60
AGCGAAACTG	CGGAAGCTGA	AAGAAAAAGA	AGAGTTAGAA	ACAGGTAAAA	AGGATCAGAG	120
TAAACAAAAG	GAATCTCAAA	GGAAATTGTA	AGAAGAAACT	GTAAAATCCA	AAGTGACTGT	180
TGATACTGGA	GTAATTCCTG	CCTCTGAAGA	GAAAGCAGAG	ACTCCACAG	CTGCAGAAGA	240
TGACAATGAA	GGAGACAAA	AGAAGAAAGA	TAAGAAGAAA	AAGAAAGGAG	AAAAGGAAGA	300
AAAAGAGAAA	GAGAAGAAAA	AAGGACCTAG	CAATGCCACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:1217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```

GAATTCGGCC TTCATGGCCT AGCCATTATT AAGACCTGTG ACAAAAACTA TAGACATGAT      60
GCAGTGAAGA TTCTGAAACT CAAGCCTGTG CTGCAGAGAA GTCTCACTCA CCTCCTACC      120
ATAGCCCCAG AGGGGTCCAG ACCCCAGGGT GGTTGCCCA GCAGCAAGCT AGACAGTGGA      180
TTTGCCAAGA CATCTGTTGC TGCTTCTCTA TACCACACAC CCTCTGACTC CAAGGAAATT      240
ACTCTTACTG TTAATTCAA GGACCCTGAA AGACCTCCTG TTCATGACCA ACTTCAGGAC      300
CCACGACTGC TGAAGAGGAT GGCATTGAG GTCAAAGGAG GAATATTCCT TTGGGATCCA      360
CAACCCTCGA G                                     371

```

(2) INFORMATION FOR SEQ ID NO:1218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```

GAATTCTAGA CTCCCGCGCG TACTCGGCCG CCTGAGCGAT ACTAAATGT CTGATGATGC      60
TGGTGACACC TTAGCCACTG GAGACAAAGC AGAAGTTACT GAGATGCCTA ATAGTGATTC      120
TTTACCTGAG GATGCAGAAG TGCATTGTGA TTCAGCTGCA GTTTCACATG AGCCAACACC      180
AGCTGACCCC AGAGGGGAGG GGCATGAAAA TGCAGCTGTG CAGGGTGAGG GGGCTGCCGC      240
CATTGGGCCC CCTGTGCAGC CTCAGGATGC CAACGCCTG GAGCCCCCTC TCAATGGAGA      300
CGTGACTGAG GATACACTTG CTGAATGTAT TGATTCCTGG AGCCTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:1219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

```

GAATTCTAGA CCTGCCTCTC CTGTCACTTC CTTGTGTTT CTCTGTGACC GGCCTCTGTT      60
CCCACCACCC TTTTGGAAGT GCTGTCCTGA TGGTCACCAG TGCTTTCCTA ATAGCCAAAT      120
TCAGTGGCCT GTCCTCAAGC TCCCCGAAT TCTTTGGCCA CACAGATCAA CCTCTAAGTC      180
CTGGGAAGTC CCTCCTTTGT GATTTTGAGG CGCTGTGTGC TGCAGGCTCT GCTTTTCCCT      240
CCCATCACCC CATGGTTCTT CCTTCTCCTC TGACCCCTCC CTCTTCCATT TCTCCACAG      300
CTCTGTCCAC AGCCACAATG TCCATAGGAG CCTGCCACAC CCTTTATCCA ACTGCAGCCT      360
CAACCACCT GCAAAGGACC CCTGAACTCG AG                                     392

```

(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

```

GCAAGCTACT TCTTCAACAG CTGTATCTGC TTCAAAGCCG ACTGCCTCTC CTTCAAGCAT      60
TGCAGCAAAC AATTGTACTG TGAATACGTC ATCAATTGCA ACGTCTTCAA TGAAGGGTCT      120
TACGACTACA GGAAACTCGT CTCTTAATAG CACATCTAAC ACTAAAGTAT CAGCAGTGCC      180
TACAAATATG GCTGCCAAGA AAAACATCTA CCCCCAAAAT AAATTTGTGT GGTGGTAATA      240
AGCTGCAGTC NACAGGAAAT AAAGCAGGAG ACCTTAAAAG GGACCCGAAT GTGTTAAAAG      300
TAATCCTGTC ATTTCTGCTG TGCAGATTCC TGAAGTAAAG CAAGACACAG TGTCAAGACC      360
AGTCACACCT GCATCTCTTG CTGCTTTACA GAGTGATGTG CAGCCAGTGG GCCATGATTA      420
TGTGGAAGAG GTACGAAATG ATGAAGGAAA AGTAATTCGG TTCCATTGTA AATTATGCGA      480
GTGCAGCTTT AATGATCCCA ATGCTAAGGA GATGCACTTA AAAGGGCGAA GACACAGACT      540
TCAATATAAA AAAAAAGTAA ATCCAGATT TCAAGTAGAA GTAAAGCCAA TACTCGAG      598

```

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

```

GAATTCGGCC TTCATGGCCT AGAGGAGTCC TGTCAGTTCG TTCTCTGCTG TGTCCTCCAAG      60
ACCATGAATC ATGGCTGGCA TGTAGTAGGC ATTTAATAAT ATATGTTCAA CAAGTATTTG      120
GCAGTCTTGG AGGGCAGAAA AGGAGGTGGG GAAGATTTT AAATAACATT TTTTAAAAAG      180
TCACATTGTC CTACAATACC GATTTTTCTT GCATATTTAG GAAATTGAGG GTTTTTTTCT      240
AAAACATGCG GACATATGGG AAATAGGATG CAACATTTGC ACTAATGTTT CAGACACAGT      300
TAGAGGTTTC CAAGAGATT TGCCTGGGT CACTCGAG      338

```

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

```

GTCGAGTGA CATGGAACT GAGGTCTTAG AGACACGTGT AATGGAGAGG AGAGGAATGG      60
AGACCTGTGC GATGGAAACC AGAGGGATGG AAGCAAGGGG CATGGATGCA AGAGGATTGG      120
AGATGAGGGG CCCTGTCCCC AGTTCAAGAG GCCCTATGAC TGGTGGAATT CAGGGTCCTG      180
GTCCCATTAA TATAGGGGCA GGTGGCCCTC CTCAGGGACC CAGACAGGTC CCAGGCATT      240
CAGGGGTGGG GAATCCTGGA GCTGGTATGC AGGGTACAGG CATACAAGGA ACAGGCATGC      300

```

AGGGAGCAGG CATACAAGGA GGAAAAATGC TCGAG

335

(2) INFORMATION FOR SEQ ID NO:1223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

```

GAATTGGGCC TTCATGGCCT AGGTACAGAC TGAACCCAGG AACCCGGGTA TCTGCGTCCT      60
GAGTCCCAGC GCCCACCAGG ACTGGGGCCT CCTCACATCT ACTCTGAGGA CAGAATCTAT      120
TGGCAGAGTC TTCCTTTTGG TTTGGGATGC TGGGTTTGAG AACATGCCGG GAACCAAGAG      180
TCGTGACTAA TCCAATTTTG AGCGCTTGAG GACCAAGTGG AAAGAACTC AAGCAGATTT      240
AAAGTGACCA ATGTCTGGTT ATGCCCTTGA GCCCCTGCAG AAGCAAACAA TAATTTTGTG      300
TGTGTGTGGA CAAATACATT TGTATTCCAG ATCTCACAGA ATTCCTACA CAAAGAAATT      360
TGCAAGGAAA ATGGACATTG CACCCTAAAA ATTAACAAGG AAAGAAGGTA CCAGGAGCAA      420
CAACTCATTG ACAGGAACAG AAACAATATT GCAAATATTT CAGATGCAAA GTGTATCCGA      480
CTTATAATAC AACTGTCCCT ACTGTGTCTA AAGAAATGAA AGGCAATCCT CGAG          534

```

(2) INFORMATION FOR SEQ ID NO:1224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

```

TCACGAATGG CCCACAGGGA TCAGGAATGG TATGATGCTG AAATTGCCAG AAAACTGCAA      60
GAAGAAGAAC TTTTGGCTAC CCAGGTGGAC ATGAGAGCCG CTCAAGTAGC TCAAGATGAA      120
GAAATCGCTC GACTTCTAAT GGCTGAAGAA AAGAAAGCTT ACAAAAAAGC CAAGGAGCGG      180
GAGAAATCAT CTTTGGACAA AAGAAAAGCAA GACCCCGAGT GGAAGCCAAA AACAGCTAAA      240
GCAGCAAATT CCAAGTCAAA AGAGAGTGAT GAACCTCACC ATTCTAAGAA TGAAAGGCCA      300
GCACGGCCAC CACCACCTAT CATGACAGAT GGTGAAGATG CGGATTCTCT CGAG          354

```

(2) INFORMATION FOR SEQ ID NO:1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

```

GCAACAAAAC AAAACAAAAC ACACTTATGG TAACCCATTG TGTGAGGAG TCCAAAACCTC      60
GAATAAAGCG CCTCATTGCC TTAACTGGT TCTGTGGCAG TGAGATCATC ATCCTTATGC      120
TGGCTCACCT AGTGTCTCTC TCTCTCTCCC GTTTTCTCTC TCCCTCTCTT ATCCCCTTGA      180
CTCTCCCCAC TTCTCATCTT CTCTTAGAT TATGTGGTAG CTATCCTCAA GAGCTCATAG      240

```

```

TGCCTGCCTG GATCACTGAC AAAGAACTGG AAAGTGTATC AAGTTTCAGG TCCTGGAAGC      300
GCATCCCTGC CGTCATCTAC AGGCACCAGA GCAATGGAGC TGTCAATGCC CGCTGTGGAC      360
AGCCAGAGGT TAGCTGGTGG GGCTGGCGAA ATGCAGATGA TGAGCATCTG GTACAGTCAG      420
TAGCCAAAGC TTGTGCCTCT GACTCCCGAT CGAGTGGCAG CAAGCTGTCA ACTAGGAAAC      480
GACTCGAG                                         488

```

(2) INFORMATION FOR SEQ ID NO:1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

```

GATCCCCACC AAAACAGGAA AAGAAGTGCT CTCGTGCAGG GCTTGTTTAC AGTGAGCCTG      60
GCTGGCTCCT CATGATCTCT GAGTTTAAAA TGTGCCAGCA GATGATTTTA ACGATCCCAT      120
CAAAAATTGT TGTCTGGATC AGTTTCGAGC TAGCGTTTCC TTGCAGAGGC CATTCTTCCT      180
TTTTTGACAA AAGTTGGGTC GGCCAGGTGC AGTGGCTCAT ACTTGTGATC CACCTGCCTT      240
GGCCTCCCAA AGTGC GGGA TTCTAGGCAT GAGCCACCAC ACCCTGCCAG AAAAATGGAT      300
TTAAAAAGAG AATTACAAAG TACTCGAG                                         328

```

(2) INFORMATION FOR SEQ ID NO:1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

```

GAATTCGGCC TTCATGGCCT AAAATTTTTA AAAAATATTT ATAATGATAG TTAGAGAACT      60
GTTTATATGA GGATCAGACA TTGTTTCAGC ACTGGATCTC CTCTGTCCCC TCTCTTGCTA      120
CAGCATACAG CCCAGAGACA CACATGTAAA AGTAGATGAT CTCTGTAAAC TTCAGCTGCA      180
TTTCTGTATG TGTAGGATTG TCCTANTATC AGATATCCTT TGAGAAAGAG TTGGAGAGGC      240
ATGGAAGGAA GCATATTCCT GACCTCCCCC CTTTTTAGCT AAAGATACAA ATTCAGAGCT      300
GTTTGAAAAG GGCTTAGAAT AATATTAATT AAACATATTC TATAATACAA AGAGAAGTAC      360
TTTTTTAAAA TACATTTATT TTTCTTTCTT TTTTAGCAGG CATTTCTGAC AGAAAATCTT      420
TAGGGCCAAT TAGAGTTTCT TTCTGACTTT TAATTGCCCT CTGCCTTTTG GGAAAGTGT      480
GAAAAAAGCT CTGGAAGAAA ATATGCTGGT CAAGGTCGCA ACTCGAG                                         527

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(2) INFORMATION FOR SEQ ID NO:1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

GAATTCGGCC	TTCATGGCCT	AAGAAAACAG	CCTAGAATTA	AACCTCCAAG	ATGAGTGTGA	60
GATGAAGCCT	TTCCACCTAT	CCCAACAAGG	TTTAAAAAAA	ATAAAAACTA	GAATGGGGCT	120
ACTACACAAC	AGCCCTTTGC	CCCACCCAAG	GCTCATTCCC	TAGAGGCAAG	TGTACGAGTT	180
TATTCTCCT	TGAAATTATT	TCCATATCTC	CAAATAGTGT	TTATACCACT	CAAGGCAGAG	240
ATAGCAATTT	GCCTACCCAG	TATACATTC	CCCTCGAG			278

(2) INFORMATION FOR SEQ ID NO:1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

GAATTCGGCC	TTCATGGCCT	AGCCACCTTG	AAGCTCTCAA	ATATCACTGT	TGTGAATACA	60
GAGAGGGAAA	ACCAACTGTA	ACGTGCCACC	CAAATTTTTT	CAGATTAATA	CATCATTCAT	120
CAGACTTCAT	TCGTGATCTC	GAAGAGTGAC	ATCAGTCTTC	CTTGGAATAT	GAAGAGAATT	180
TCTTTGGTTC	TTCTTTTGCA	TTTCTATTTG	ATTTATTTTA	TTTTATTTTA	TTTTATGTTT	240
TTTGGTACAG	AAAGCTCATT	ACTAGTCCTG	TCCAGCAACG	TGCCTCTCCT	GGCCCTAGAG	300
TTCTTTGAAA	TAGCCCAGGC	CAAAGAGAAG	GCCTTTCTCC	CCATGGTCAG	CCACACGTTT	360
CACATGCGCA	CAGAGGAGTC	TGATGCCTCA	CAGGAGGGCG	ATGACCTACC	CAAGTCCTCA	420
GCAAACACCA	GCCATCCCAA	GCAGGATGAC	AGCCCCAAGT	CCTCAGAAGA	AACCATCCAG	480
CCCAAGGAGG	GTGACATCCC	CAAGGCCCCA	GAAGAAACCA	TCCAAATCAA	GAAGGAGGAC	540
CTCCCCAAGT	CCTCGGAAAA	AGCCATCCAG	CCCAAAGAGA	GTAACATCCC	CAGAGCCCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:1230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

GAATTCGGCC	TTCATGGCCT	ACCGGGCAGT	TAGGCCCAAG	CGCCGGGTTC	AGGCCTCCAA	60
AAACCCCTG	AAAATGCTGG	CGGCAAGAGA	AGATCTCCTT	CAGGAATACA	CTGAGCAGAG	120
ATTAAACGTT	GCCTTCATGG	AGTCAAAGCG	GATGAAAGTA	GAAAAGATGT	CTTCCAATCT	180
CAACTTCTCA	GAAGTCACCC	TGGCGGGTTT	AGCCAGTAAA	GAAAACCTTCA	GCAACGTCAG	240
CCTGCGGAGC	GTCAACCTGA	CGGAACAGAA	CTCTAACAAC	AGCGCCGTGC	CCTACAAGAG	300
GCTGATGCTG	TTGCAGATTA	AAGGAAGAAG	ACATGTGCAG	ACCAGGGTGG	TGGAACCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

GAATTCGGCC	TTCATGGCCT	AGTCCCTGTT	CAATTTCTCT	CAGCCTCAAT	ATCTTTTACT	60
TTAAACTAGG	TAGGGTTACC	AGTTCAATGA	TCTGCTCATT	AAATACTTAC	TATACCTTAG	120
GTACTATATG	AGAAGCTAGG	AAAAGAGTGA	TGAAAAAGAC	ACACCTAGAG	AGGGCATTGG	180
ATTATTAAAT	CAGCAGCTAC	TGTAAAGGTA	TTTAAGTTCT	GTGACAGGCA	GCATTCTGGG	240
TATCACAGGA	ACATCTTACA	AGAATTTCTA	ACTTCAGGAG	GAGGGTTTCAG	AGAATTAGCC	300
AGGCCAGGGG	TGAGAGTGTT	CTTCCCGGAA	GAGGGAACAA	TGAAGACCCA	GGAGGAGATA	360
CAGAGTATCT	CGCTGTATTT	AAAATAACCA	GAAATAGATT	TATATATTTA	GTACAGAGGC	420
TGAGGGGAAG	AGAAGTGAGT	GTGAGAAGAT	CAAAAGGAGA	AGCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

GAATTCGGCC	TTCATGGCCT	ACAATCATCT	CAACAGTTC	CGGGTTGCTG	CCCTTTTGGC	60
TTTCCTAGGT	GCTACAGTAG	CAGGCTGTTT	TCCCTTTTC	CATAGAGGGG	AATATTCTGC	120
ATCACCCCTT	TGTTTGCCAT	TTCCTACAGG	TGAAACGCCA	TCATTAGGAT	TCACTGTAAC	180
GTTAGTGCTA	TTAAACTCAC	TAGCATTTTT	ATTAATGGCC	GTTATCTACA	CTAAGCTATA	240
CTGCAACTTG	GAAAAAGAGG	ACCTCTCAGA	AAACTCACAA	TCTAGCATGA	TTAAGCATGT	300
CGCTTGGCTA	ATCTTCACCA	ATTGCATCTT	TTTCTGCCCT	GTGGCGTTTT	TTTCATTTGC	360
ACCATTGATC	ACTGCAATCT	CTATCAGCCC	CCCACTCGAG			400

(2) INFORMATION FOR SEQ ID NO:1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

GAATTCGGCC	TTCATGGCCT	AGGATATAGA	CCAAACCCAA	ATCCTGTTGG	ACAAGGGATT	60
AGACCACCTA	TGGCTGGATG	CAACAGTTTC	GTAGGCGGCA	TGAGTATGTC	GCCAAACCAA	120
GGCTTACAGA	TGCCGAGCAG	CAGGGCCTAT	GGCTTGGCAG	ACCCTAGCAC	CACAGGGCAG	180
ATGAGTGGAG	CTAGGTATGG	GGGTTCCAGT	AACATAGCTT	CATTGACCCC	TGGGCCAGGC	240
ATGCAATCAC	CATCTTCCTA	CCAGAACAAC	AACTATGGGC	TCAACATGAG	TAGCCCCCCA	300
CATGGGAGTC	CTGGTCTTGC	CCCAAACCAG	CAGAATATCA	TGATTTCTCC	TCGTAATCGT	360
GGGAGTCCAA	AGATAGCCTC	ACATCAGTTT	TCTCCTGTTG	CAGG1GCGCA	CTCTCGAG	418

(2) INFORMATION FOR SEQ ID NO:1234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

GAATTCGGCC	TTCATGGCCT	ACGCCTCTTT	AACACATGGG	CCTTTGTGTG	GACACCATCT	60
TTCCCTGAAA	CCTGTCTGCA	TCTTTTCTGT	CCCTTCTAAC	CATCCAGTTT	GTTCTTCCCC	120
AAGATGGGCT	GCCACAAGTT	GCCATTTCCT	GACTGGTGCA	TGGTCCAGA	CAGCTCGCGG	180
GCAGACACAG	GGAAGGAATC	TTATCTCGTT	TTTGTTTTTT	TGTTGTTGTT	TTTGTTTTTT	240
TCTTTTTTGT	TGTGGTTGTT	GCTGTTGTTT	TGAAACGGAG	TCTCACTCTG	TTGCCAAGGC	300
TGGAGTGCAG	TGGCGCAATC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

GAATTCGGCC	TTTATGGCCT	AAAAAAAAAA	AAAGAAAGAA	AGAAAATGTT	GGATATAGTA	60
GGTCTGAGCT	TTATGGAGAA	AGAAGGTTTG	AAGTAGCTTC	TGGGATATGG	AAAAAGAACT	120
TATGAGAGAA	ACAGACTTCT	GGGAATCCTT	CAAGGACTAG	AAGAGAACAT	AGATTATGAA	180
AGAATGAGTC	ATTGATCAGT	GTAGTTGTAG	ATTAGAATAG	TTGGACAGTT	AGGATTTGCT	240
AGGCAGAAGA	ATGGAGGAAG	TCACGGCCTA	GGGAGTTAAC	AGTGTTAGGA	GCAAGAGAGG	300
TTTTAACTAA	TGAGCCATGG	AGTTTAAGCA	GAGACAATAG	AGAATAAAGT	AAAATAGGAA	360
GAAAAATTTA	AAAAGAAAGT	AGAAAAGTCC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

GAATTCGGCC	TTCATGGCCT	ACACAATTCC	AAAGAAGGTG	GTGTGCCACT	TCAGTGGGAA	60
GGCCTATGCC	GACGAGGAGC	GGTGGGACCT	TGACAGCTGC	ACCCACTGCT	ACTGCCTGCA	120
GGGCCAGACC	CTCTGCTCGA	CCGTCAGCTG	CCCCCTCTG	CCCTGTGTTG	AGCCCATCAA	180
CGTGGAAGGA	AGTTGCTGCC	CAATGTGTCC	AGAAATGTAT	GTCCCAGAAC	CAACCAATAT	240
ACCCATTGAG	AAGACAAACC	ATCGAGGAGA	GGTTGACCTG	GAGGTTCCCC	TGTGGCCCCAC	300
GCCTAGTGAA	AATGATATCG	TCCATCTCCC	TAGAGATATG	GGTCACCTCC	AGGTAGATTA	360
CAGAGATAAC	AGGCTGCACC	CAAGTGAAGA	TTCTTCACTG	GACTCCATTG	CCTCAGTTGT	420
GGTTCCCAT	ATTATATGCC	TCTTATTAT	AATAGCATTC	CTATTCATCA	ATCAGAAGAA	480
ACAGTGGATA	CCACTGCTTT	GCTGGTATCG	AACACCAACT	AAGCCTTCTT	CCTTAAATAA	540
TCAGCTAGTA	TCTGTGACGC	TCGAG				565

(2) INFORMATION FOR SEQ ID NO:1237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

GAATTCGGCC	TTCATGGCCT	ACACTGAGAA	CGAGATGGCT	ATTTATGAAT	TCATTCATAA	60
CTTTGTGGAA	GTTTTAGATG	AGTATTTTCTAG	CCGAGTGAGT	GAATTAGATG	TATCCTTTTT	120
CAATACTGTT	TTCCACAGTA	CTTGGCAAAT	GCACTCTGCT	CCTTATCAGG	TAAGTACCAC	180
AAGGCAGGAA	AACTATTCTAG	CAGAGTCCAG	AGTGTTCATC	ACCAACAAC	ATGACAAGAC	240
AGCCAGAGGT	GTGTGTGTTC	TGCAGAACTC	CTCCCCAACT	TCGTCACCCA	AGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1238:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

CTCGAGTGGG	GGGAGGGAGG	GGGAGGAGAG	AAGGGGAGGT	GGATGGGGGA	GGGGGACAGT	60
GGAGGAAGAG	GGAAGAGGGA	GAAAATAAGG	AGAAAGAGAA	GGAAAGGCAG	AAGGGGAGGG	120
GAAGGGGGAA	GGGAAGAAG	AAGGGGAATG	GGAAGAGAAT	GAAGAGGAAG	AGAAGAGGAA	180
GAGTAGGAGG	AGAAATAACA	AAAGGCACCA	GTTTGGAAAG	GAAGAATTA	AAATATATTT	240
ATTTGCAAAC	GACATTATCC	TATAGTGAAA	AATCCTTAAA	AGTTAGGCCA	TGAAGCCGAA	300
TTC						303

(2) INFORMATION FOR SEQ ID NO:1239:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 315 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGCT	TCATGGCCTA	CTCTTCTCTG	AGACAGAAAA	CTAGCGAACC	CCAGGGGAAG	60
GTGCCGTGTG	GAGAGCACTT	TCCGATTCCG	CAGAATCTAC	CAGAGCACAC	CCAAGGCTGG	120
CTTGGGAGCA	AATGGCTCTG	GCTTCTTTTT	GTTGTTGTGC	CGTTTGTGAT	ACTGCAGTGT	180
CAAAGAGACA	GTGAGAAGAA	TAAGGAGCAG	AGTCCTCCTG	GCCTTCGAGG	CGGCCAACTT	240
CACTCTCCAT	TAAAGAAAAA	AAGAAATGCT	TCCCCCAACA	AAGACTGTGC	ATTCAATACC	300
TTAATGGAAC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:1240:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 553 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

```

GAATTCGGCC TTCATGGCCT AAAATGACCT TGGTAAGAAT GGGTTTTTAC AATAAATGAA      60
TTTTTAATTC CAAGATGTTT TTTCATTGAA ATTACTGCCC CAGTTGCATT AAAAGTGTGG      120
CTGTGCAAAG CTCCTTCTA CCAGGCTTCA TGTGCAGGAC CTTGGTTTTT GTTGCCTTGG      180
CAATTCCAAA AGCAGGTGTT GAAAGAGAAG AAGACAGGAA AAAGAAGATG GGAGAAAAAT      240
TTTCCAAATC AGAGTTCTCA GTCCAAGGAC TTATTCTTGG GGGTTCAAAA ATTCTAACAG      300
TATTTTAAAA TTGCCTCTAT TTCGATGGTT ACTTGATTAA ACTGTTCTAA CATTTCTAAA      360
AATAAAAAAT TGCAATGATA ACTTTTATAT CAGACTTTAC CTCTGTTTCC CAAATTGGAA      420
TCTTTAGGAA TATTTTTTTG AGATCACTTT TTTCCCTTTT TTCTTTAACA AAGATTGGGA      480
ACCGCTCTTA GGAACAGACA AATGGATTTC CATATTCTTT AAAGCGTTGA AGTAAATCTC      540
TGCCACCCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

```

GAATTCGGCC TTCATGGCCT ACTCTTCTCA AGGCTTTGAA ATCTCCCTT GCACTGAGAT      60
TAGTCGTCAG ATCTCTCCCC GTCTCCCTCC CAACCTTATAC GACCTGATTT CCTTAGGACG      120
GAACCCGAGG CACCTGCGCC GGGCGTCTTA CTCCCGCTGC TTGTTCTGTC CCTCCCTCG      180
GACCAAACAG TGCTCATGCT TCAGGACCTT GTTTGTCGAA GATGTTGGTT TCCCTTTCTC      240
TGTTATTTAT ATAAAAATAA TTTATCAAAA GGATATTTTA AAAAAGCTAG TCTGTCTTGA      300
AACTTGTTTA CCTTAAATAT ATCAGAACTC CAGTGTTTGA AAGTACTGAA GCACAAACAT      360
ATATCATCTC TGTACCATTG TGTACTAAAG CACTTGAGTC TAATAAATAA AGAAATCAGC      420
ACCCCTAGGC CATGAAG

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(2) INFORMATION FOR SEQ ID NO:1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

```

GAATTCGGCC TTCATGGCCT AAAAAATAT GTCTTTTGAA AACCNAGTCA AGTACCTAGA      60
GATGAAAACC ACAAATGAGA AACTGTTACA GGAATTAGAT ACACTTCAAC AACAATTGGA      120
TTCACAGAAC ATGAAAAAAG AGAGCCTGGA AGCAGAAATA GCTCACTCCC AGGTGAAACA      180
GGAGGCGGTA TTGCTGCATG AAAAAGTTTA TGAGTTGGAG TCCCATCGAG ATCAAATGAT      240
TGCAGAAGAC AAAAGCATAG GATCTCCAAT GGAAGAGAGA GAGAAATTAC TTAAGCAGAT      300
TAAAGATGAT AATCAGGAAA TAGCCAGCAT GGAAAGACAG TTAACAGATA CAAAAGAAAA      360
GATAAATCAG TTTATTGAAG AAATTAGACA ACTTGACATG GATTTAGAGG AACACCAAGG      420
TGAAATGAAC CAGAAATACA AGGAGCTAAA GAAAAGGGAG GAACATATGG ACACTTTTAT      480
TGAGACTTTT GAGGAAACAA AGAATCAGGA ACCAAAATC GAG

```

(2) INFORMATION FOR SEQ ID NO:1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

GAATTCGGCC	TTCATGGCCT	AACTGATTAC	AGGGAAAGAC	AAAAAGCAAA	AGGTGATTGA	60
AACATAGTTC	TAAATAACAA	GAAGGGAAGT	TTTCTTAAAC	TGATCATCTG	TCTTATTGTC	120
ATGACAAAGG	GTAAAATTTT	ATTTTCAGTC	CTTTAGTGCT	TTTTAATAAT	TCACCATACA	180
TATTTTACTT	ATATCCCAT	AACTGTGGGA	CTTAGCACAG	TTTACATTTT	CAGTCATGTG	240
AATATAATTA	TCTGTATTCC	CTGTTGGACT	GATGGGGGAA	ATTGGATCAT	TATATAATTT	300
AAAAGACACC	TCCCCAGGCA	CCCATTGTGT	TCTTAGGAAG	TCAGTGCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

GAATTCGGCT	TCATGGCCTA	ATTCAGCTTT	ATCGTTCCT	CTGGCAGTTC	AGTTGTTGGC	60
CCAGATTTAT	TAAGGTTTCA	CAGAAAGCAA	CTGAAATCTC	CCTTAGAAAT	AAAGTTCCTG	120
GTGTGAAGAA	AAAAAAGATC	CATAAAAAGT	CTCATCCTTA	GGACAGCAAC	TTTTATAATG	180
CACAGCTGAT	CTGAATAGCT	CTCTGGATTG	TGGCCTTGGA	CAACAGTTCA	GACTGCATTA	240
TTGAGTATGA	ACCTTGAGCT	TTCTGAGTCT	CTTCTTTTGG	CTCTTTTACT	AGCAGACCTT	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:1245:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 591 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

GAATTCGGCC	TTCATGGCCT	AGGGTTTGGG	GGTTCTGAGA	TGTTACTCTC	ACTGAAGTCT	60
GTGTGGGAGG	CGGATTACTA	AACAAGAAAT	TGCTAATTAA	TCTCCAGATG	GCAAGGAATG	120
GATAAAGCAC	TGTTCCCAAC	AAGGTCCAAA	TGTCCTCGCT	GGAAGAGTGT	ACAATGGATG	180
CAGTTGGTCT	TCCTGCTGGC	AACAGTACCA	CCGAAGCGCT	TGGGGCAAGT	TCCAAATCCA	240
GTAACCTCTT	TTTATAATCT	TCTTTGGTAA	ATTCCCTCCT	GGGAAACATG	GTTGCTAACG	300
AAAAATTACC	GTAAGTGTTG	CCAACAGTCT	GTGCAGCAAA	CTGCCTTGCC	TCTTCTAGAG	360
GAGCATCAGA	AGGGAAGTGA	TTTGTAAGG	AAGAACCATC	AGGAAGACGG	AATTGAATTC	420
TTGCAACAGT	GCTTCTTTCT	CTTGCAATAAG	ATTCCCTCTT	GACTTCCATT	TCTGCCTGTT	480
TTGCTAGCAA	GGCAGCAGCT	TTGGCAGCCT	CTACTTCTTC	CTTTGTCTTT	GCAAAACGAG	540
CAGCTCTCTC	TGCACGGTCC	AATGCAATCT	GCTGTTTTAT	ACGTTCTCGA	G	591

(2) INFORMATION FOR SEQ ID NO:1246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 593 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

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GAATTCGGCC TTCATGGCCT ACTTCGGGGA AGAAACCTTC ACCAGAGTGG AGCAGTTCAG      60
ACCATGGAAC CTCTGATCCA AGCAGCCCAG CTCCTGCAAT TAAAGAAGAA AATCCAGGAG      120
GACGCAGAGG CTATCTGCTC CCTGTGTACC TCCCTCAGCA CCCAGCAGAT TGTCAAATTT      180
TTAAACCTTT ATACTCCCCT GAATGAATTT GAAGAACGGG TAACAGTGGC CTTTATACGA      240
ACAATCCAGG CACAACCTACA AGAGCGGAAT GACCCTCAGC AACTGCTATT AGATGCCAAG      300
CACATGTTTC CTGTTTGTGTT TCCATTTAAT CCATCTTCTC TAACCATGGA CTCATCCAC      360
ATCCCAGCGT GTCTCAATCT GGAATTCCTC AATGAAGTCT GAAGATGCAT GTTCCAGCA      420
TTAGTTTGAT TCCCAATGTG AGCAAGAAGG AAGTATATAC AGTAAAGTAA ATTCAAGGAT      480
CTGTTAAATC TGGTAAAAGT AGATCAAATC AGAGATTGAC AGCCTGTGGA GGGTGCTGAA      540
CTATACAGAA TTAGACACAA CTATGTCATT ATTTTGTGTA CCAACTACTC GAG          593

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(2) INFORMATION FOR SEQ ID NO:1247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

```

GAATTCGGCC AAAGAGGCCT AAATCAGAA TGGTGCTACT TGAAGACTCT GGATCTGCTG      60
ACTTCAGAAG ACATTTTGTC AACTGAGTC CCTTCACCAT TACTGTGGTC TTAATCTCA      120
GTGCCTGTTT TGTCACCAAGT TCTCTGGAG GAACAGACAA GGAGCTGAGG CTAGTGGATG      180
GTGAAAACAA GTGTAGCGGG AGAGTGGAAG TGAAAGTCCA NGAGGAGTGG GGAACGGTGT      240
GTAATAATGG CTGGAGCATG GAAGCGGTCT CTGTGATTTG TAACCAAGCTG GGATGTCCAA      300
CTGCTATCAA AGCCCCTGGA TGGGCTAATT CCAGTGCAGG TTCTGGACGC ATTTGGATGG      360
ATCATGTTTC TTGTCGTGGG AATGAGTCAG CTCTTTGGGA TTGCAAACAT GATGGATGGG      420
GAAAGCATTG TTGCAATCAC AATGAAGATG CTGGCGTGAC ATGTTCTGAT GGATCAGATC      480
TGGAGCTAAG ACTTAGAGGT GGAGGCAGCC GCTGTGCTGG GACAGTTGAG GTGGAGATTC      540
AGAGACTGTT AGGGAAGGTG TGTGACAGAG GCTGGGGACT GAAAGAAGCT GAACTCGAG      599

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(2) INFORMATION FOR SEQ ID NO:1248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

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GAATTCGGCC AAAGAGGCCT AACCGAATGG ATTATCTGTG GGAGTAACAT CTCAGAAGAC      60

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TATGAAGCTA ATTCCTGCCT CAAGACACAG AGCTACACAA AAGGTGGTTA TTGGAGATCA      120
TGATGGGGTA GTTATGTGCT TTGGCATGAA GAAAGGAGAA GCAGCAGCAG TGTTCAGAC      180
TTTACCCGGG CCGAAGATTG CAAGGCTGGA ACTGGGAGGG GTTATCAACA CACCTCAGGA      240
GAAAATTTT ATTGCTGCAG CATCTGAGAT TAGAGGCTTC AAAAAAGAG GAAAACAGTT      300
CCTCTCCTT GAAACAAACC TCACTGAAAG CATTAAGCT ATGTATGTCT TTTGTTCTCT      360
TTTGTATTT TACATACTTA TTTATAATAT TTTGGATAGA TGTGAGGCAA CCCTCGAG      418

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(2) INFORMATION FOR SEQ ID NO:1249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 800 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

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GAATTGGGCC AAAGAGGCCT AGCAGAGCAC AGCATCGTCG GGACCAGACT CGTCTCAGGC      60
CAGTTGCAGC CTTCTCAGCC AAACGCCGAC CAAGGAAAAC TCACTACCAT GAGAATTGCA      120
GTGATTTGCT TTTGCCTCCT AGGCATCACC TGTGCCATAC CAGTTAAACA GGCTGATTCT      180
GGAAGTTC TG AGGAAAAGCA GCTTTACAAC AAATACCCAG ATGCTGTGGC CACATGGCTA      240
AACCCTGACC CTTCTCAGAA GCAGAACTCT CTAGCCCCAC AGACCCTTCC AAGTAAGTCC      300
AACGAAAGCC ATGACCACAT GGATGATATG GATGATGAAG ATGATGATGA CCATGTGGAC      360
AGCCAGGACT CCATTGACTC GAACGACTCT GATGATGTAG ATGACACTGA TGATCTCACC      420
AGTCTGATGA GTCTCACCAT TCTGATGAAT CTGATGAACT GGTCACTGAT TTTCCACGG      480
ACCTGCCAGC AACCGAAGTT TTCCTCCAG TTGTCCTCCAC AGTAGACACA TATGATGGCC      540
GAGGTGATAG TGTGGTTTAT GGACTGAGGT CAAAATCTAA GAAGTTTCGC AGACCTGACA      600
TCCAGTACCC TGATGCTACA GACGAGGACA TCACCTCACA CATGGAAAGC GAGGAGTTGA      660
ATGGTGCATA CAAGGCCATC CCCGTTGCC AGGACCTGAA CGCGCCTTCT GATTGGGACA      720
GCCGTGGGAA GGACAGTTAT GAAACGAGTC AGCTGGATGA CCAGAGTGCT GAAACCCACA      780
GCCACAAGCA GTACCTCGAG                                     800

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(2) INFORMATION FOR SEQ ID NO:1250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

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CAATTGCCAA GGAAACAGGC CTTGGCCTGA AGGTACTAGG AGGAATTAAC CGGAATGAAG      60
GCCCATTGGT ATATATTTCAG GAAATTATTC CTGGAGGAGA CTGTTATAAG GATGGTCGTT      120
TGAAGCCAGG AGATCAACTT GTCTCAGTCA ACAAGGAATC TATGATTGGT GTATCATTTG      180
AAGAAGCAA AAGCATAATT ACCGGAGCCA AGTTGAGTAC TAGGTTAGAA TCTGCTTGGG      240
AGATAGCATT CATAAGACAA AAATCCGACA ACATTGAGCC AGAAAATCTG TCATGTACAT      300
CACTTATAGA AGCTTCAGGA GAATATGGAC CTCAAGCCTC CCTCGAG      347

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(2) INFORMATION FOR SEQ ID NO:1251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

GAATTCGGCC	TTCATGGCCT	ACAGCCCTCT	TACTAGGCCA	GCACGCTTTC	GCTTTTGCAT	60
TTACAATCAC	ATACCCCATC	CCCTCCACTT	GAAAAAGAAT	TTTGTTTTTG	TCGTTATCCA	120
AAAATCTCAT	CTTAAATCAA	CCGTCTCGTC	TCCCTGTAGC	TTCATTACCA	TCTCAGAAGC	180
AGCAAAGGAG	CCAGCAAAAG	CTAAGGTACA	GAAAGTCGCT	TTGGAGGATG	ATGGTGAGTG	240
GTTATACTTA	ATAGAAGCTA	TCATTTATTA	AGCACCTAAT	GTGTGTCTGG	AGGGGCTCGA	300
G						301

(2) INFORMATION FOR SEQ ID NO:1252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

GAATTCGGCC	TTCATGGCCT	TGCATGCCCA	CAGTGAGCTG	AGATCGCAGC	ACTGTACTCC	60
ATCCTGGGGG	ACAGAGCTAG	ACTCCATCTC	AAAAACGAAA	GTGCCTGGTC	GTCTTTCCAC	120
ACGACTCCGT	TTCACTCCC	ATAAAATGCT	ACGTTAGCTG	TTTTGAGGGT	AGATGCCCTT	180
AGACTGCCAA	CTCACAAAGT	TTTATTGGGC	ACCTGTTACC	TGTTCCAGCAG	AGATTGTAA	240
AAAAAGACAC	ATCAGGTGGC	CTTTGCTTGC	AAGAAATCAG	CCTTTGGAAC	CTGTGGAGAA	300
AAGTTAAATA	CTGCGTACTG	TGCAAATGAA	GGGTGGGAGC	TATTGAAGGG	AAGAGATTCA	360
CCCTGAAAAC	CCAAGAATGG	CCAAATCTCG	AG			392

(2) INFORMATION FOR SEQ ID NO:1253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

GATTCGGCCT	TCATGGCCTA	GCTGGTCTCT	GGTTGCAGGA	TCGAATCGCC	CCCAGCAGTA	60
TGTGTATATG	CATCAGATAA	GGTGAGGGAC	AACCTTCCTC	ACCCCATAC	CTGGCCAGCC	120
TGTAATGGGG	AGGAGGCCTT	TCTGTGGTGT	GGTGGGGCTG	GAGATTGGGC	AGGGACAGAG	180
ACATACCTTC	TCTGGGAATC	TGAGAGAGAT	ACCTTGAATC	TAGGGGAAAG	GGATTAGGTT	240
TTGAAAATGT	TAGCCATTTT	GTAAAGAGAA	GTCCCTCACC	ATTTCCTTTC	CCATTAGTCC	300
TGGGAAATAG	ATTGGGTAGA	GGCTCAGAGC	CTGGCCCCTG	CTGCACTCCC	AGCTTGAGC	360
TACTGGGTTG	TTGACAATGT	TTTGGGGTTT	CCAGGCCCTA	GCAAGAGAAA	GCCTCCCCAG	420
ATACCACTCT	AGGGGTAGAT	GAAGGGGGCA	GGAGCCCTGA	AGGAAGGATT	TGGGGCCGGC	480
CATTATTCA	TTCAGAAACA	CTTATCATCC	CTTATCAGAA	GCCCTGACCT	ATTGAGAGTC	540
AGGCACGTGC	TATTGAGAGT	CAGGCACGTG	CTCATATAAA	GATGAGTTTA	ACATGGATCT	600
CCCTCTCGAG						610

(2) INFORMATION FOR SEQ ID NO:1254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

GAATTCGGCC TTCATGGCCT AGAGGATTTA CACATGGCAT TCAGTGTCT	GTATAGATCT	60
GCCTACCTTT GTGAATTCAT CTGTTAACCC CTCTTCCTTT	GAGAGAGCAC CGGCGATGGT	120
GGTTAACTCC TGTGTTTTCT CTCTCTCCTA CTGGTTATTC	TTGAATTAAG CACAGACTCG	180
TCAGCTCGGT TGCTTTATCA TGAATAATGT GTGTGACCTT	GCAGTTCTTC CACAGTTCAG	240
CAAACAAGTG CTAGCTTCAC TGACCAAAA TTAAGGAAGG	AAAACACAGT TTTTAAACG	300
ATCCATCTTT TAACAGCCGA AACTCGAG		328

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 488 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

GAATTCGGCC TTCATGGCCT ACTAAGAGAA CAATTAGAAT ATTGGAAGAT	AAAGGGACAA	60
GTACTGAATT AGTTAAAGAA AATCAGAAAC TTAAGCAGCA	TTTGGGAAGAG GAAAAGCAGA	120
AAAAACACAG CTGTCTTAGT CAAAGGGAGA CTCTGTTGAC	AGAAGCAAAG ATGCTAAAGA	180
GAGAACTGGA GAGAGAACGA CTAGTAACTA CGGCTTTAAG	GGGGGAACTC CAGCAGTTAA	240
GTGGTAGTCA GTTACATGGC AAGTCAGATT CTCCCAATGT	ATATACTGAA AAAAAGGAAA	300
TAGCAATCTT ACGGGAAAGA CTCACTGAGC TGGAACGGAA	GCTAACCTTC GAACAGCAGC	360
GTTCTGATT GTGGGAAAGA TTGTATGTTG AGGCAAAAGA	TCAAATGGA AAACAAGGAA	420
CAGATGGAAA AAAGAAAGGG GGCAGAGGAA GCCACAGGGC	TAAAATAAG TCAAAGGAAA	480
CACTCGAG		488

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

GAATTCGGCC TTCATGGCCT AGATCCAGAC ACGGCACTGC	AGCTTTCAGC TGACTAGCTG	60
TGTGACTTGG GCAAGCCCCT TAATCTCTCT	GATCTCGGGC TCCCTCCTCT	GTAAAATGGA
ATTAAGAATA ACCTCATTGA GGAGCTTCCT	GAGGAGGTAA GGAAAGTGCC	TGGCACAGTG
CCAGGCTGCT AAGAGATCAA TAAATGTCCC	ATCCCCCAGC CCCACCCAG	TTCTTTCCAG
GAATTTGAGA GACTCCTCCC CCTGTGTTTG	AAAGTGCAA AGTCTGGCAC	ACTTGCCTCA
TAACACATAA CTCGAG		316

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 346 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

GAATTCGGCC	TTCATGCCTA	AGCTTCCTTC	AGCAGCGCAG	GCGGTGGTCC	CTGAGGCCCCG	60
TGGAAGGAGT	CAAACCTGCG	GGAATTTTGC	AGTTTATCTG	CAGGGCTGTT	GTTTCCAGCA	120
AGACCCAAAG	CTAGAAAAGG	AGGAGGAAGA	AACTGACCCG	ATCAGTGCCA	GAAGTCATTG	180
TATTCAAAGA	AGAATAAGCA	AGAAAGAAAA	GAAGGAAGGA	AGAGAGGTAG	ACAGATACAA	240
GATGAAATCC	TGTCAAAAAA	TGGAAGGAAA	ACCAGAAAAT	GAGAGTGAAC	CAAAGCATGA	300
GGAAGAGCCA	AAGCCTGAGG	AAAAGCCAGA	AGAGGAGGAG	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1258:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 346 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

GAATTCGGCC	TTCATGGCCT	ACGGCACTTC	AAAAATATAA	ATCAAAGTCC	ATGACTCTAA	60
AAATAACATA	TGCATTGATA	TGCTCGCCCC	TTTGACCCTT	CTCTCAAGAG	AAATTCCTTG	120
CCAAGTAATC	CACATACATA	AGAAGTGTA	AAAGTCCCTA	GATTAAGA	GCATAAACT	180
TCATTATGGA	AACACAGTAG	TCCCGGCTAT	TTGGGAGGCT	GAGACAGGAG	GATCACCAGT	240
CCAGGAGTTT	GAGGCTACAG	TGAGCTATGA	TCGCGCCATT	GCACTCCAGC	CTGGATGACA	300
GAGGAAATAT	TAATTTTAGA	GTAATCAGAG	AAAGCCAGGT	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1259:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 341 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

GAATTCGGCC	TTCATGGCCT	ACCCCATTC	TGCAGGAATA	AATCAAGTGA	GCAGTTCCAG	60
ACTTTTGAT	AATATTTT	CTATGATGCT	GTTTATTAA	TATTTTCTAA	ATTTCAAAAC	120
AAAAAGTGAA	TGTTTGAAAT	TGCTGGGTCC	CGATGTTGGT	GGCTGTTGGA	GTTTGGACC	180
ACTCGCTAGC	AGTGATTTGA	AGATTATAAT	TAGCTAAAAT	CCAAAACAAA	AAACCAACAA	240
CAAAAATTGT	ATGGTGCGGA	ACATGCACCT	TGACAATGGT	ACTAACTTGT	TATTCTATAG	300
AACACGTTAG	AATAGATCTA	TTTTTGCCAG	AGCTTCTCGA	G		341

(2) INFORMATION FOR SEQ ID NO:1260:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 416 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GAATTCGGCC	TTCATGGCCT	AAAGATAAGG	TGGCTGTAAA	TGCGTGGATT	TATACCTGAG	60
TTCTCTCATC	TGTTTCACTG	ATCCATGTGT	CTGTTTTTAT	GCCAGTACCA	TGCTGTTTTG	120
ATNACTATAG	CTTTGTAATA	AATTTTGAAG	TCAGGTAGTG	TGATNCCTCC	AGCTTCATTC	180
TTTTTGCTCA	GGATNGCTTT	GGNTATTCA	AGTCTTGTTG	TTCCATGTAA	ATTTTAGGTT	240
TTTTTTTTTT	TTTTTTTTTT	TTTTTACTAT	TTCTGTGAAG	AATGTTATTG	GTATTTTGAT	300
AAGGATTGTA	TTGAATCTGT	AAATTGCTTT	GGGTAGTCTT	GTCATTTAAA	AATATTGTTA	360
TAGTTCTTCT	AATCCATGAA	CATAGAATAC	CTTTCATT	TTTTGGTGTC	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:1261:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 86 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

GAATTCGGCC	AAAGAGGCCT	AGGCAGACAT	CCATAAACAT	TTTCAAATG	CAGGGTATGT	60
TTTTCAGTGT	TAAGGCAACT	GTTCTG				86

(2) INFORMATION FOR SEQ ID NO:1262:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 332 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

GAATTCGGCC	AAAGAGGCCT	ACTTTTGGTA	ATAACATTTT	AAAGCAGGAA	GTATCTACGG	60
TGTGATCGTG	GTACAGCTCT	TAGTTCAAGT	GTGAAGACAT	TTGGTTGTCT	TGTATATGAC	120
CTAGAAGAAG	GGGCGTCTGC	TGGAAAACAA	TGCTGTTCTT	TTTCTCTTTG	TTTTTTGGGA	180
CGGGGTCTTA	CTCTGTTGCC	CAGGCTGCAG	TGCAGTGCCT	CAATTTTTC	GTTTCAGTGCA	240
GCCTCGACCT	CTGGGGCTTA	AGCGATCCTC	CTGCCTCGGC	CTCCCCAGTG	ACTGAGACCG	300
CAGGCACACA	CCACCACACC	CGGCACCTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:1263:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

GAATTCGGCC	AAAGAGGCCT	AAGCCAGGGT	AGGGACAGCA	GACTGGCAGG	AATGAGTGAC	60
AGTTCTATGC	AAATGGAGTT	ATTATTATTA	TTGTTATTAT	TAATAAGGGC	AGGTTTGTAC	120
CAGAACTGCC	CAGTATGGCC	TGTGACTTCT	GCGCAGCAAT	TATTTCTCCA	GGGACAGGGC	180
CTGAAGCTAC	CTCACAGTGA	TGCAAAAAAA	TGGGATTCCC	CACTAACCCC	CACACACACC	240
CCCTTCCTAC	CAAAACCACAC	ATCTCTCAGT	CCTCTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

GAATTCGGCC	AAAGAGGCCT	AGGATCACGG	AGGTGGTGCC	TGTGTGTCCC	ACAGGAAGCA	60
AAAGCTGATG	CCCAGTTCCC	AGCATACCTA	AGTAAACTTC	AGGTCCACTC	CCAGCACGTT	120
TCTCGTGATA	GTAAACTAT	GAAGGAACTC	AGTGTAACAAG	GAGCTTCTAC	AAAATAGGCA	180
GAAGACAGTA	GCCAGATGGG	CCAAGGGCCC	CAGCCACCCA	CGCCCCCTCC	TCTCCTTGAA	240
GACCTTCGGT	TCCAACCCCA	CCATCAGCAG	GGCTCTGCTC	AGTTCCTCCT	TATGTGTATC	300
ACCACAGGGC	TGCTGGCTCG	TGTCACGTTT	ACCACCAGAC	CCCACATCAG	GAGTCCCGCC	360
AGGGGTGTGG	GGAGGCAGCG	CTGCCTGGTT	GGCCGTGGAG	CCGTATGGAA	CATGGTGCCT	420
CACAGGCAGT	CTGCTTGGCG	TCCTGGATCC	TGGCTGTATC	CCGCTGGAAA	GGATGTGTGT	480
GGGTCTAAGA	TATGTATATA	ATAGAAACAT	TTATTTCAGAA	GCTTTAGTCA	AGACTTCATT	540
TTTAAGTTCA	GAGTAATAAA	CTCATAGTCT	AAATTCCTA	ATTTTCTGT	TTAATTTACA	600
TAAATAAAAT	GAAATGCAAT	TCCTCGAG				629

(2) INFORMATION FOR SEQ ID NO:1265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

GAATTCGGCC	AAAGAGGCCT	AGAGGTGCCC	ATTTCATAAA	ATTTTAGCAC	ACTGGATGAT	60
AAAGGAGAAA	TGCTTTGGTT	TAAGAGAGGG	AAATCTTTGT	TACCAATACT	ATCGGTGAGT	120
TCACCTAATA	CTTCCTCGTC	ATCAAGTTCA	TTGGAGTACG	CATCTTCTTC	ATCCTCATCT	180
CCCGGTTTCA	TGGGTTCACT	TTTGACAGGG	CACTCCCCGT	TTGGGTGTAA	AACGTTGCTT	240
TCTTTTGGCC	TTTCACAGTT	GTTCTCTTGG	TCTTTGCTCT	CTGACATCTT	GCTAGACTCA	300
GACGATGAGT	GGCTGAGGGA	GACAGAGGTA	ATTGGGGTGT	TCACTACTAA	ACTAGACAGC	360
CCCCCAGAT	TCACTTCAGC	CTTGGCATT	TGGGTAATCC	CCAGCGGCTG	CTCTGCTGAG	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double